```
=> FIL REG
FILE 'REGISTRY' ENTERED AT 11:18:06 ON 18 SEP 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)

=> D HIS NOFILE

     FILE 'HCAPLUS' ENTERED AT 10:56:41 ON 18 SEP 2009
                E US2005-537478/APPS
L1             1 SEA SPE=ON  ABB=ON  PLU=ON  US2005-537478/AP
                SEL L1 RN

     FILE 'REGISTRY' ENTERED AT 10:57:04 ON 18 SEP 2009
L2             6 SEA SPE=ON  ABB=ON  PLU=ON  (18194-24-6/BI OR 63-89-8/BI

     FILE 'HCAPLUS' ENTERED AT 10:59:33 ON 18 SEP 2009
                E FUGETSU B/AU
L3            42 SEA SPE=ON  ABB=ON  PLU=ON  "FUGETSU BUNSHI"/AU
                E BUNSHI NAME/AU
                E BUNSHI FUGETSU/AU
L4             1 SEA SPE=ON  ABB=ON  PLU=ON  "BUNSHI FUGETSU"/AU
L5            43 SEA SPE=ON  ABB=ON  PLU=ON  (L3 OR L4)
                E HOKKAIDO TECHNOLOGY LICENSING/CO
                E E4+ALL
L6            36 SEA SPE=ON  ABB=ON  PLU=ON  "HOKKAIDO TECHNOLOGY LICENSING
                OFFICE CO LTD"/CO,CS,PA
                E NATIONAL UNIVERSITY CORPORATION HOKKAIDO UNIVERSITY/CO
                E E3+ALL
L7         19239 SEA SPE=ON  ABB=ON  PLU=ON  ("HOKKAIDO UNIVERSITY"/CO,CS,PA
                 OR "NATIONAL UNIVERSITY CORPORATION HOKKAIDO UNIVERSITY"/C
                O,CS,PA)
L8         19275 SEA SPE=ON  ABB=ON  PLU=ON  L6 OR L7
L9         10166 SEA SPE=ON  ABB=ON  PLU=ON  L2
L10       618613 SEA SPE=ON  ABB=ON  PLU=ON  NANO?
L11           17 SEA SPE=ON  ABB=ON  PLU=ON  L9 AND (L5 OR L8)
L12          547 SEA SPE=ON  ABB=ON  PLU=ON  L9 AND L10
L13       530452 SEA SPE=ON  ABB=ON  PLU=ON  (SURFACT? OR BIOSURFACT? OR
                HYDROTROP? OR DETERG? OR ABSTERG? OR (SURFACE(W)ACTIVE# OR
                WETTING#)(A)(AGENT? OR ADDITIVE? OR COMPOUND? OR COMPD# OR
                CMPD# OR CPD#) OR EMULSIFIER? OR DISPERSANT? OR SOAP?)/BI,A
                B
L14           88 SEA SPE=ON  ABB=ON  PLU=ON  L12 AND L13
L15       196562 SEA SPE=ON  ABB=ON  PLU=ON  COLLOID?
L16          189 SEA SPE=ON  ABB=ON  PLU=ON  L9 AND L15
L17           35 SEA SPE=ON  ABB=ON  PLU=ON  L16 AND L10
L18           86 SEA SPE=ON  ABB=ON  PLU=ON  L14 NOT L11
L19           35 SEA SPE=ON  ABB=ON  PLU=ON  L17 NOT L11
L20           38 SEA SPE=ON  ABB=ON  PLU=ON  1808-2003/PY,PRY,AY AND L18
L21           12 SEA SPE=ON  ABB=ON  PLU=ON  1808-2003/PY,PRY,AY AND L19
L22           48 SEA SPE=ON  ABB=ON  PLU=ON  L20 OR L21
L23          798 SEA SPE=ON  ABB=ON  PLU=ON  L9 AND DISPERS?
L24           48 SEA SPE=ON  ABB=ON  PLU=ON  L23 AND L10
L25           48 SEA SPE=ON  ABB=ON  PLU=ON  L24 NOT L11
L26           15 SEA SPE=ON  ABB=ON  PLU=ON  1808-2003/PY,PRY,AY AND L25
L27           60 SEA SPE=ON  ABB=ON  PLU=ON  L26 OR L22
```

```
=> FIL HCAP
FILE 'HCAPLUS' ENTERED AT 11:18:16 ON 18 SEP 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)


=> D L11 1-17 IBIB ABS HITSTR HITIND RETABLE

L11  ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2009:1080075  HCAPLUS  Full-text
DOCUMENT NUMBER:          151:298002
TITLE:                    Immune response inducing composition comprising
                          protein-liposome complex for iontophoresis
INVENTOR(S):              Kajimoto, Kazuaki; Yamamoto, Masahiko; Kogure,
                          Kentaro; Harashima, Hideyoshi
PATENT ASSIGNEE(S):       TTI Ellebeau, Inc., Japan; National
                          University Corporation Hokkaido University;
                          Dharma Therapeutics
SOURCE:                   PCT Int. Appl., 35pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     ----------          ----   --------    -------------------      --------
     WO 2009108686        A1    20090903    WO 2009-US35116          20090225
         W:  AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY,
             BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE,
             EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN,
             IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU,
             LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL,
             SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR,
             HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL,
             SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
     JP 2009203174        A     20090910    JP 2008-44839            20080226
PRIORITY APPLN. INFO.:                     JP 2008-44839        A   20080226

                                           US 2008-88939P       P   20080814

AB   Provided is a composition for iontophoresis comprising a neg.-charged protein-
     liposome complex, in which the protein-liposome complex is formed of a neg.-
     charged protein and a cationic liposome.  Such may provide a composition
     capable of efficiently delivering a protein having a large mol. weight
     intradermally and inducing an immune response effectively by iontophoresis.
     Thus, DOTAP, DSPC, and Chol were mixed into an organic solvent such as CHCl3
     at a ratio of 2/5/3 (DOTAP/DSPC/Chol), whereby a solution (total lipid weight
```

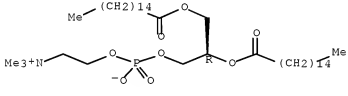
of 1.6 mg) was obtained; the organic solvent was removed under reduced pressure; next, 0.5 mL of 10 mM HEPES buffer was added to the lipid thin membrane so that the total concentration of the lipid was 5 mM, followed by hydration at room temperature for 10 min; the resulting mixture was sonicated and a liposome solution was obtained; 150 µl of a 100 mg/mL ovalbumin (OVA) aqueous solution was added to 500 µl of the DSPC liposome solution; the obtained mixed liquid was incubated at room temperature for 30 min and centrifuged at 5,000xg and 4°C for 5 min; the obtained pellet was suspended in 150 µl of a 10 mM HEPES buffer, whereby an OVA-liposome complex solution was obtained.

IT 63-89-8, Dipalmitoylphosphatidylcholine 816-94-4, Distearoyl phosphatidylcholine
(immune response inducing composition comprising protein-liposome complex for iontophoresis)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

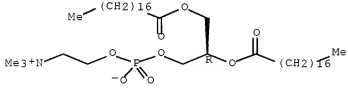
Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 15

IT 57-88-5, Cholesterol, biological studies 63-89-8, Dipalmitoylphosphatidylcholine 80-97-7D, Dihydrocholesterol, fatty acid derivs. 107-64-2, Dioctadecyl dimethylammonium chloride 816-94-4, Distearoyl phosphatidylcholine 20910-06-9D, Cholesteryl, fatty acid derivs., ethers 24447-63-0, Didodecylammonium bromide 53678-77-6, Muramyl dipeptide 113669-21-9 168479-03-6 757169-34-9
(immune response inducing composition comprising protein-liposome complex for iontophoresis)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Boulikas Teni	2001			WO 0193836 A	HCAPLUS
Clarke Peter	2007			US 20070066552 A1	HCAPLUS
Cortesi, R	2006	317	90	INTERNATIONAL JOURNA	HCAPLUS
Fearon Karen L	2004			US 20040136948 A1	HCAPLUS
Gregoriadis	1980	10	103	PHARMACOLOGY AND THE	HCAPLUS

L11 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:837630 HCAPLUS Full-text

TITLE: PK-PD modeling of 1-(3-C-ethynyl-β-D-ribo-pentofuranosyl)cytosine and the enhanced antitumor effect of its phospholipid derivatives in long-circulating liposomes

AUTHOR(S): Takada, Akitsugu; Kamiya, Hiroyuki; Shuto, Satoshi; Matsuda, Akira; Harashima, Hideyoshi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Hokkaido University, Kita-12, Nishi-6, Kita-ku, Sapporo, 060-0812, Japan

SOURCE: International Journal of Pharmaceutics (2009), 377(1-2), 52-59
CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The efficacy of an antitumor nucleoside, 1-(3-C-ethynyl-β-D-ribo-pentofuranosyl)cytosine (3'-ethynylcytidine, ECyd), was analyzed in vitro and in vivo. The in vivo antitumor effect of ECyd encapsulated into long-circulating liposomes was also examined Based on pharmacokinetic (PK) and pharmacodynamic (PD) analyses, a model that quant. explains the in vivo effects of ECyd was proposed, using the concept of min. effective concentration The model suggests that ECyd followed a time-dependent mechanism of action in vivo, and that availability of ECyd in tumor tissue was highly important. To improve the availability of ECyd, its phospholipid derivs. were synthesized and encapsulated into long-circulating liposomes, which increased the antitumor effect. These results indicate that it is very important to design carriers of antitumor drugs based on PK-PD modeling.

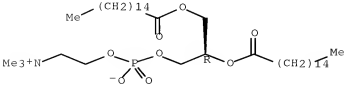
IT 63-89-8

(P0K-PD modeling of 1-(3-C-ethynyl-β--ribo-pentofuranosyl)cytosine and the enhanced antitumor effect of its phospholipid derivs. in long-circulating liposomes)

RN 63-89-8 HCAPLUS

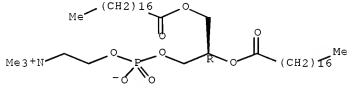
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 816-94-4
(PK-PD modeling of 1-(3-C-ethynyl-β--ribo-pentofuranosyl)cytosine and the enhanced antitumor effect of its phospholipid derivs. in long-circulating liposomes)
RN 816-94-4 HCAPLUS
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
IT 63-89-8
(P0K-PD modeling of 1-(3-C-ethynyl-β--ribo-pentofuranosyl)cytosine and the enhanced antitumor effect of its phospholipid derivs. in long-circulating liposomes)
IT 816-94-4 4235-95-4 180300-43-0
(PK-PD modeling of 1-(3-C-ethynyl-β--ribo-pentofuranosyl)cytosine and the enhanced antitumor effect of its phospholipid derivs. in long-circulating liposomes)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Allen, T	1991	1066	29	Biochim Biophys Acta	HCAPLUS
Blume, G	1990	1029	91	Biochim Biophys Acta	HCAPLUS
Dams, E	2000	292	1071	J Pharmacol Exp Ther	HCAPLUS
Endo, Y	2007	98	1633	Cancer Sci	HCAPLUS
Harashima, H	1999	61	93	J Control Release	HCAPLUS
Hattori, H	1996	39	5005	J Med Chem	HCAPLUS
Ishida, T	2003	255	167	Int J Pharm	HCAPLUS
Ishida, T	2003	88	35	J Control Release	HCAPLUS
Klibanov, A	1990	268	235	FEBS Lett	HCAPLUS
Laverman, P	2001	298	607	J Pharmacol Exp Ther	HCAPLUS
Matsuda, A	2004	95	105	Cancer Sci	HCAPLUS
Ozawa, S	1988	21	185	Cancer Chemother Pha	HCAPLUS
Ozawa, S	1989	49	3823	Cancer Res	HCAPLUS
Papahadjopoulos, D	1991	88	11460	Proc Natl Acad Sci U	HCAPLUS
Shimamoto, Y	2002	93	445	Jpn J Cancer Res	HCAPLUS
Shimamoto, Y	2002	93	825	Jpn J Cancer Res	HCAPLUS
Shimoyama, M	1975	40	711	Bibl Haematol	HCAPLUS
Shuto, S	1987	28	199	Tetrahedron Lett	HCAPLUS
Szoka, F	1980	9	467	Ann Rev Biophys Bioe	HCAPLUS
Tabata, S	1997	116	225	Cancer Lett	HCAPLUS
Takatori, S	1999	44	97	Cancer Chemother Pha	HCAPLUS
Takatori, S	1998	17	1309	Nucleosides Nucleoti	HCAPLUS

Tsuchihashi, M	1999	61	9	J Control Release	HCAPLUS
Vaage, J	1993	54	959	Int J Cancer	HCAPLUS

L11 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:505364 HCAPLUS Full-text
DOCUMENT NUMBER: 150:455598
TITLE: Electrostatic ion chromatography of common anions and cations with a zwitterionic surfactant-modified silica-C18 column using water eluent
AUTHOR(S): Masuda, Wakako; Kozaki, Daisuke; Nakatani, Nobutake; Goto, Ryozo; Mori, Masanobu; Fugetsu, Bunshi; Tanaka, Kazuhiko
CORPORATE SOURCE: Grad. Sch. Int. Dev. Coop., Hiroshima University, Higashihiroshima, 739-8529, Japan
SOURCE: Bunseki Kagaku (2009), 58(4), 311-315
CODEN: BNSKAK; ISSN: 0525-1931
PUBLISHER: Nippon Bunseki Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

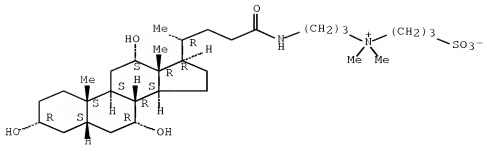
AB Electrostatic ion chromatog. (EIC) of anions and cations with water eluent has been investigated for the development of water-monitoring systems in developing countries, which have the nature of simple, lower running cost, and non-chemical waste. For selecting the separation column, sulfobetaine-type zwitterionic surfactant (CHAPS)-modified silica C18 and silica C30 columns, and a zwitterionic stationary phased column HILIC were compared for anion sepns. The retention order of the analyte anions was SO42- < Cl- < NO3- < I- < Cl4- without regard to the types of the columns, depending on the nature of EIC separation However, the resolns. were different, because the anion sepns. by EIC were strongly affected by the hydrophobicity of the stationary phase. As a result, the CHAPS-modified silica C18 column was the most suitable as a separation column in EIC in terms of the peak resolution and the retention time. In contrast, cation sepns. using the CHAPS-modified silica C18 column with a water eluent were in the order of monovalent cations (Li+, Na+, K+ and NH4+) < divalent cations (Mg2+ and Ca2+). This fact means that the sulfobetain-type zwitterionic stationary phase has much higher selectivity for anions than for cations. Moreover, a pre-column (cation-exchange resin in the Li+-form for anion sepns., and anion-exchange resin in the Cl--form for cation sepns.) was connected in tandem before the separation column, in order to make uniform the counter ion for analyte ions and to apply this method to real water samples. Under the optimized conditions, the linearity of the calibration graph, the detection limit, and the reproducibility for the common anions were tested, and satisfactory results was obtained for all common anions. The potentiality of EIC was demonstrated in practical applications to the determination of common anions (SO42-, Cl-, NO3- and HCO3-) and hardness in river water.

IT 75621-03-3, 3-[(3-Cholamidopropyl)-dimethylammonio]-1-propane sulfonate
(electrostatic ion chromatog. of common anions and cations with zwitterionic surfactant-modified silica-C18 column using water eluent)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

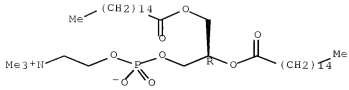
Absolute stereochemistry.



CC 61-3 (Water)
Section cross-reference(s): 79
IT 75621-03-3, 3-[(3-Cholamidopropyl)-dimethylammonio]-1-propane sulfonate 243856-72-6, L-Column ODS
(electrostatic ion chromatog. of common anions and cations with zwitterionic surfactant-modified silica-C18 column using water eluent)

L11 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:587275 HCAPLUS Full-text
DOCUMENT NUMBER: 146:58077
TITLE: Molecular dynamics simulation of water pore formation in lipid bilayer induced by shock waves
AUTHOR(S): Koshiyama, Ken-ichiro; Kodama, Tetsuya; Yano, Takeru; Fujikawa, Shigeo
CORPORATE SOURCE: Division of Mechanical and Space Engineering, Graduate School of Engineering, Hokkaido University, Sapporo, 060-8628, Japan
SOURCE: AIP Conference Proceedings (2006), 829(Therapeutic Ultrasound), 583-587
CODEN: APCPCS; ISSN: 0094-243X
PUBLISHER: American Institute of Physics
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Water mol. penetration into a bilayer hydrophobic region with a shock wave impulse has been investigated using mol. dynamics simulations. Here we report results of simulation of spontaneous water pore formation in a bilayer that contains water mols. in the hydrophobic region in an initial state. The bilayers of 128 DPPC lipid and 3655 water mols. with insertion of 392, 784, and 1176 water mols. in the hydrophobic region are simulated. A water pore is spontaneously formed when 1176 water mols. exist in the hydrophobic region. The water pore diameter is estimated to be c.a. 1.9 nm, which is three times larger than that of 5-fluorouracil (5FU) used in cancer treatment.
IT 63-89-8, Dipalmitoyl phosphatidylcholine
(mol. dynamics simulation of water pore formation in lipid bilayer induced by shock waves)
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 9-16 (Biochemical Methods)
IT 63-89-8, Dipalmitoyl phosphatidylcholine 7732-18-5, Water, biological studies
(mol. dynamics simulation of water pore formation in lipid bilayer induced by shock waves)
RETABLE

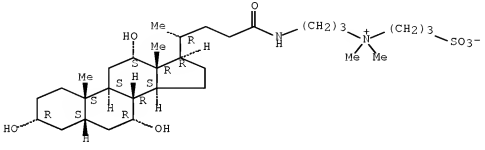
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Buur, A	1996	129	223	International Journa	HCAPLUS
Feril, L	2002	29	173	Journal of Medical U	
Kodama, T	2000	79	1821	Biophys J	HCAPLUS
Koshiyama, K	2005	754	104	AIP(American Institu	HCAPLUS
Pearlman, D	1995	91	1	Computer Physics Com	HCAPLUS
Smondyrev, A	1999	20	531	Journal of Computati	HCAPLUS
Tieleman, D	2003	125	6382	Journal of the Ameri	HCAPLUS
Zahn, D	2002	352	441	Chemical Physics Let	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:734539 HCAPLUS Full-text
DOCUMENT NUMBER: 143:482989
TITLE: Strict preparation and evaluation of water-soluble hat-stacked carbon nanofibers for biomedical application and their high biocompatibility: Influence of nanofiber-surface functional groups on cytotoxicity
AUTHOR(S): Sato, Yoshinori; Shibata, Ken-ichiro; Kataoka, Hideo; Ogino, Shin-ichi; Sunshi, Fugetsu ; Yokoyama, Atsuro; Tamura, Kazuchika; Akasaka, Tsukasa; Uo, Motohiro; Motomiya, Kenichi; Jeyadevan, Balachandran; Hatakeyama, Rikizo; Watari, Fumio; Tohji, Kazuyuki
CORPORATE SOURCE: Graduate School of Environmental Studies, Tohoku University, Sendai, 980-8579, Japan
SOURCE: Molecular BioSystems (2005), 1(2), 142-145
CODEN: MBOIBW; ISSN: 1742-206X
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Water-soluble H-CNFs modified with a carboxyl group possessed the ability to induce TNF-α, whereas CHAPS-treated H-CNFs possessed significantly greater activity and were also found to activate NF-κB reporter activity, to a significantly greater level than H-CNFs; furthermore the functional group modified or coated on the surface of H-CNFs was a significant cytotoxic factor that affected cell activation.
IT 75621-03-3, CHAPS
(preparation and cytotoxic evaluation of water-soluble hat-stacked carbon

nanofibers for biomedical application and biocompatibility)
RN 75621-03-3 HCAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 63-7 (Pharmaceuticals)
IT 75621-03-3, CHAPS
(preparation and cytotoxic evaluation of water-soluble hat-stacked carbon nanofibers for biomedical application and biocompatibility)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aderem, A	2000	406	782	Nature	MEDLINE
Akira, S	2001	2	675	Nat Immunol	HCAPLUS
Alexander, C	2002	14	53	Trends Glycosci Glyc	
Bethune, D	1993	363	605	Nature	HCAPLUS
Bianco, A	2003	15	1765	Adv Mater	HCAPLUS
Cherukuri, P	2004	126	15638	J Am Chem Soc	HCAPLUS
Dodziuk, H	2003		986	Chem Commun	HCAPLUS
Endo, M	2003	3	723	Nano Lett	HCAPLUS
Fubini, B	1997	105	1013	Environ Health Persp	
Fujita, M	2003	171	3675	J Immunol	HCAPLUS
Georgakilas, V	2002		3050	Chem Commun	HCAPLUS
Hoet, P	2004	22	19	Nat Biotechnol	HCAPLUS
Hoshino, A	2004	4	2163	Nano Lett	HCAPLUS
Iijima, S	1991	354	56	Nature	HCAPLUS
Iijima, S	1993	363	603	Nature	HCAPLUS
Janeway, C	2002	20	197	Annu Rev Immunol	HCAPLUS
Kahn, M	2002	2	1215	Nano Lett	HCAPLUS
Lam, C	2004	77	126	Toxicol Sci	HCAPLUS
Lin, Y	2004	14	527	J Mater Chem	HCAPLUS
Liu, J	1998	280	1253	Science	HCAPLUS
McNamara, A	1981	2	33	Biomaterials	HCAPLUS
Okusawa, T	2004	72	1657	Infect Immun	HCAPLUS
O'Connell, M	2001	342	265	Chem Phys Lett	HCAPLUS
Palacios, E	2001	62	135	Hydrometallurgy	HCAPLUS
Pantarotto, D	2003	10	961	Chem Biol	HCAPLUS
Pantarotto, D	2004		16	Chem Commun	HCAPLUS
Pantarotto, D	2003	125	6160	J Am Chem Soc	HCAPLUS
Pompeo, F	2002	2	369	Nano Lett	HCAPLUS
Rodriguez, N	1993	8	3233	J Mater Res	HCAPLUS

Sano, M	2001	17	7172	Langmuir	HCAPLUS
Star, A	2002	41	2508	Angew Chem, Int Ed	HCAPLUS
Takeda, H	1989	16	477	Crit Rev Microbiol	
Uo, M	2001	22	677	Biomaterials	HCAPLUS
Warheit, D	2004	77	117	Toxicol Sci	HCAPLUS
Yokoyama, A	2005	5	157	Nano Lett	HCAPLUS

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L11 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

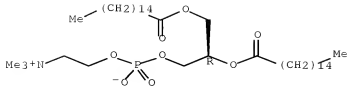
ACCESSION NUMBER: 2005:53369 HCAPLUS Full-text
DOCUMENT NUMBER: 143:60141
TITLE: Simple synthesis of diastereomerically pure phosphatidylglycerols by phospholipase D-catalyzed transphosphatidylation
AUTHOR(S): Sato, Rina; Itabashi, Yutaka; Fujishima, Hironori; Okuyama, Hidetoshi; Kuksis, Arnis
CORPORATE SOURCE: Graduate School of Fisheries Sciences, Hokkaido University, Hakodate, 041-8611, Japan
SOURCE: Lipids (2004), 39(10), 1025-1030
CODEN: LPDSAP; ISSN: 0024-4201
PUBLISHER: AOCS Press
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:60141

AB A simple method for synthesizing diastereomerically pure phosphatidylglycerols (PtdGro), namely, 1,2-diacyl-sn-glycero-3-phospho-3'-sn-glycerol (R,R configuration) and 1,2-diacyl-sn-glycero-3-phospho-1'-sn-glycerol (R,S configuration), was established. For this purpose, diastereomeric 1,2-O-isopropylidene PtdGro were prepared from 1,2-diacyl-sn-glycero-3-phosphocholine (PtdCho) and enantiomeric 1,2-O-isopropylideneglycerols by transphosphatidylation with phospholipase D (PLD) from Actinomadura sp. This species was selected because of its higher transphosphatidylation activity and lower phosphatidic acid (PtdOH) formation than PLD from some Streptomyces species tested. The reaction proceeded well, giving almost no hydrolysis of PtdCho to PtdOH in a biphasic system consisting of di-Et ether and acetate buffer at 30°C. The isopropylidene protective group was removed by heating the diastereomeric isopropylidene PtdGro at 100°C in tri-Me borate in the presence of boric acid to obtain the desired PtdGro diastereomers. The purities of the products, which were determined by chiral-phase HPLC, were exclusively dependent on the optical purities of the original isopropylideneglycerols used. The present method is simple and can be utilized for the synthesis of pure PtdGro diastereomers having saturated and unsatd. acyl chains.

IT 63-89-8
(simple synthesis of diastereomerically pure phosphatidylglycerols by phospholipase D-catalyzed transphosphatidylation)

RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 33-2 (Carbohydrates)
IT 63-89-8 4235-95-4 22323-82-6 54672-38-7
(simple synthesis of diastereomerically pure phosphatidylglycerols by phospholipase D-catalyzed transphosphatidylation)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Baer, E	1958	232	895	J Biol Chem	HCAPLUS
Buchnea, D	1978	1	233	Handbook of Lipid Re	HCAPLUS
Dittmer, J	1964	5	126	J Lipid Res	HCAPLUS
D'Arrigo, P	1996	1	2651	J Chem Soc Perkin Tr	
D'Arrigo, P	1996	1	2657	J Chem Soc Perkin Tr	
D'Arrigo, P	1997	15	90	Trends Biotechnol	HCAPLUS
Eibl, H	1980	26	405	Chem Phys Lipids	HCAPLUS
Fujishima, H	2004	70	200	Nippon Suisan Gakkai	HCAPLUS
Gombos, Z	2002	41	3796	Biochemistry	HCAPLUS
Hanahan, D	1997		165	A Guide to Phospholi	
Hartman, L	1959		4134	J Chem Soc	HCAPLUS
Haverkate, F	1963	84	106	Biochem Biophys Acta	
Hostetler, K	1982		215	Phospholipids	HCAPLUS
Itabashi, Y	1997	254	49	Anal Biochem	HCAPLUS
Itabashi, Y	2004	53	405	J Oleo Sci	HCAPLUS
Joutti, A	1976	17	264	Chem Phys Lipids	HCAPLUS
Juneja, L	1989	1003	277	Biochim Biophys Acta	HCAPLUS
Mattson, F	1962	3	281	J Lipid Res	HCAPLUS
Okabe, H	1999	48	559	J Jpn Oil Chem Soc	HCAPLUS
Rich, J	2001	32	374	Biotechnol Bioeng	
Ruettinger, R	1978	529	181	Biochim Biophys Acta	HCAPLUS
Sato, R	2004	39	1013	Lipids	HCAPLUS
Sato, R	2004	39	1019	Lipids	HCAPLUS
Shibuya, I	1992	31	245	Prog Lipid Res	HCAPLUS
Simpson, T	1991	68	176	J Am Oil Chem Soc	HCAPLUS
Veldhuizen, R	1998	1408	90	Biochim Biophys Acta	HCAPLUS
Woolley, P	1988	47	55	Chem Phys Lipids	HCAPLUS
Yang, S	1967	242	477	J Biol Chem	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L11 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:53367 HCAPLUS Full-text
DOCUMENT NUMBER: 143:224739
TITLE: Asymmetric in vitro synthesis of diastereomeric phosphatidylglycerols from phosphatidylcholine and glycerol by bacterial phospholipase D
AUTHOR(S): Sato, Rina; Itabashi, Yutaka; Hatanaka, Tadashi; Kuksis, Arnis
CORPORATE SOURCE: Graduate School of Fisheries Sciences, Hokkaido University, Hakodate, 041-8611, Japan

SOURCE: Lipids (2004), 39(10), 1013-1018
CODEN: LPDSAP; ISSN: 0024-4201
PUBLISHER: AOCS Press
DOCUMENT TYPE: Journal
LANGUAGE: English

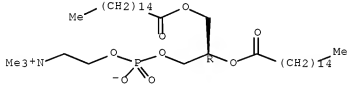
AB Using chiral-phase HPLC, we determined the stereochem. configuration of the phosphatidylglycerols (PtdGro) synthesized in vitro from 1,2-diacyl-sn-glycero-3-phosphocholine (PtdCho, R configuration) or 1,2-diacyl-sn-glycero-3-phosphoethanolamine (PtdEtn, R configuration) and glycerol by transphosphatidylation with bacterial phospholipase D (PLD). The results obtained with PLD prepns. from three Streptomyces strains (S. septatus TH-2, S. halstedii K5, and S. halstedii subsp. scabies K6) and one Actinomadura species were compared with those obtained using cabbage and peanut PLD. The reaction was carried out at 30°C in a biphasic system consisting of di-Et ether and acetate buffer. The resulting PtdGro were then converted into bis(3,5-dinitrophenylurethane) derivs., which were separated on an (R)-1-(1-naphthyl)ethylamine polymer. In contrast to the cabbage and peanut PLD, which gave equimolar mixts. of the R,S and R,R diastereomers, as previously established, the bacterial PLD yielded diastereomixts. of 30-40% 1,2-diacyl-sn-glycero-3-phospho-1'-sn- glycerol (R,S configuration) and 60-70% 1,2-diacyl-sn-glycero-3-phospho-3'-sn-glycerol (R,R configuration). The highest disproportionation was found for the Streptomyces K6 species. The present study demonstrates that bacterial PLD-catalyzed transphosphatidylation proceeds to a considerable extent stereoselectively to produce PtdGro from PtdCho or PtdEtn and prochiral glycerol, indicating a preference for the sn-3' position of the glycerol mol.

IT 63-89-8 816-94-4 18194-24-6,
1,2-Dimyristoyl-sn-glycero-3-phosphocholine
(asym. in vitro synthesis of diastereomeric phosphatidylglycerols from phosphatidylcholine and glycerol by bacterial phospholipase D)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

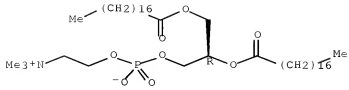
Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS

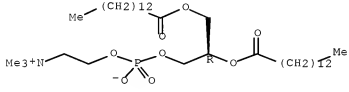
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 18194-24-6 HCAPLUS
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 7-3 (Enzymes)
IT 56-81-5, Glycerol, biological studies 63-89-8 816-94-4 998-06-1 4004-05-1, 1,2-Dioleoyl-sn-glycero-3-phosphoethanolamine 4235-95-4 18194-24-6, 1,2-Dimyristoyl-sn-glycero-3-phosphocholine
(asym. in vitro synthesis of diastereomeric phosphatidylglycerols from phosphatidylcholine and glycerol by bacterial phospholipase D)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Batrakov, S	1975	66	755	Biochem Biophys Res	HCAPLUS
Dittmer, J	1964	5	126	J Lipid Res	HCAPLUS
D'Arrigo, P	1997	15	90	Trends Biotechnol	HCAPLUS
Hagishita, T	1999	276	161	Anal Biochem	HCAPLUS
Hagishita, T	2000	22	1587	Biotech Lett	HCAPLUS
Hatanaka, T	2002	1598	156	Biochim Biophys Acta	HCAPLUS
Hatanaka, T	2002	31	233	Enzyme Microb Techno	HCAPLUS
Heller, M	1978	16	267	Adv Lipid Res	HCAPLUS
Itabashi, Y	1997	254	49	Anal Biochem	HCAPLUS
Iwasaki, Y	1994	42	290	Appl Microbiol Biote	HCAPLUS
Joutti, A	1976	17	264	Chem Phys Lipids	HCAPLUS
Juneja, L	1989	1003	277	Biochim Biophys Acta	HCAPLUS
Juneja, L	1987	9	350	Enzyme Microb Techno	HCAPLUS
Okabe, H	1999	48	559	J Jpn Oil Chem Soc	HCAPLUS
Pappan, K	1999	1439	151	Biochim Biophys Acta	HCAPLUS
Schaffner, I	2002	104	79	Eur J Lipid Sci Tech	HCAPLUS
Shimbo, K	1993	57	1946	Agric Biol Chem	HCAPLUS
Ulbrich-Hofmann, R	2000		219	Enzymes in Lipid Mod	HCAPLUS
Ulbrich-Hofmann, R	2003	105	305	Eur J Lipid Sci Tech	HCAPLUS
Waite, M	1987	5	61	Handbook of Lipid Re	
Yang, H	2002	11	2958	Protein Sci	HCAPLUS

Yang, S	1967	242	477	J Biol Chem	HCAPLUS
Yoshioka, K	1991			EP 0435725 B1	HCAPLUS
Younus, H	2004	40	95	Biotechnol Appl Bioc	HCAPLUS

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:513637 HCAPLUS Full-text
DOCUMENT NUMBER: 141:40332
TITLE: Production of nano-carbon dissolving and purifying aqueous solutions
INVENTOR(S): Fuugetsu, Bunshi
PATENT ASSIGNEE(S): Hokkaido Technology Licensing Office Co., Ltd., Japan
SOURCE: PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052782	A1	20040624	WO 2002-JP12815	20021206
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002354439	A1	20040630	AU 2002-354439	20021206
WO 2004060798	A1	20040722	WO 2003-JP15445	20031202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003303544	A1	20040729	AU 2003-303544	20031202
JP 3855007	B2	20061206	JP 2004-564478	20031202
US 20050277675	A1	20051215	US 2005-537478	20050603
PRIORITY APPLN. INFO.:			WO 2002-JP12815 A	20021206
			WO 2003-JP15445 W	20031202

AB The alkaline dissolving solution contains phospholipid- or non-phospholipid surfactants forming 50-300 nm of microspore, nano-carbon permeable substance of Li+, and a persulfate as an oxidizing agent. The surfactant is selected from ≥1 of distearoyl phosphatidylcholine, dimyristoyl phosphatidylcholine, dipalmitoyl phosphatidylcholine, 3-[(3-colamidepropyl)dimethylamino]-2-

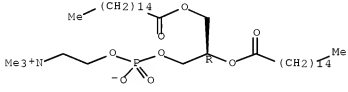
hydroxy-1- propane sulfonate, 3-[(3-colamidepropyl)dimethylamino]-1-propane sulfonate, and N,N-bis(3-D-gluconamidopropyl)deoxycholamide. Nano-carbon containing raw material is added into the solution for purification

IT 63-89-8, Dipalmitoyl phosphatidylcholine 816-94-4, Distearoyl phosphatidylcholine 18194-24-6, Dimyristoyl phosphatidylcholine 75621-03-3, 3-[(3-Cholamidopropyl)dimethylammonio]-1-propanesulfonate 82473-24-3, 3-[(3-Cholamidopropyl)dimethylammonio]-2-hydroxy-1-propanesulfonate 86303-23-3, N,N'-Bis(3-D-gluconamidopropyl)deoxycholamide
(production of nano-carbon dissolving and purifying aqueous solns.)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

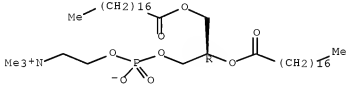
Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

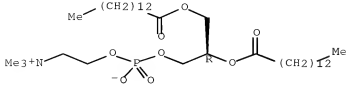
Absolute stereochemistry.



RN 18194-24-6 HCAPLUS

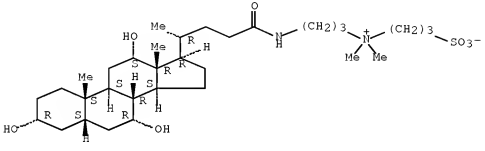
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



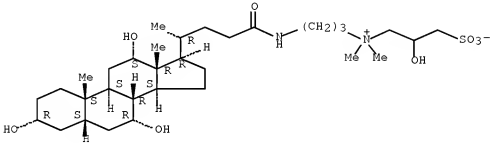
RN 75621-03-3 HCAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



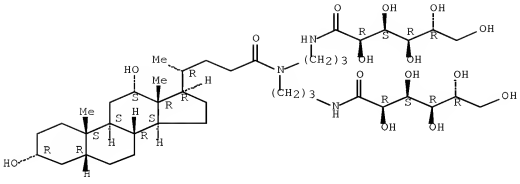
RN 82473-24-3 HCAPLUS
CN 1-Propanaminium, 2-hydroxy-N,N-dimethyl-3-sulfo-N-[3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]propyl]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



RN 86303-23-3 HCAPLUS
CN D-Gluconamide, N,N'-[[[(3α,5β,12α)-3,12-dihydroxy-24-oxocholan-24-yl]imino]di-3,1-propanediyl]bis- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C01B0031-02
CC 49-1 (Industrial Inorganic Chemicals)
IT 63-89-8, Dipalmitoyl phosphatidylcholine 816-94-4
, Distearoyl phosphatidylcholine 18194-24-6, Dimyristoyl phosphatidylcholine 75621-03-3,
3-[(3-Cholamidopropyl)dimethylammonio]-1-propanesulfonate 82473-24-3, 3-[(3-Cholamidopropyl)dimethylammonio]-2-hydroxy-1-propanesulfonate 86303-23-3,
N,N'-Bis(3-D-gluconamidopropyl)deoxycholamide
(production of nano-carbon dissolving and purifying aqueous solns.)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				JP 2001048511 A	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L11 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:746466 HCAPLUS Full-text
DOCUMENT NUMBER: 140:317362
TITLE: Use of cholate derivatives with submicellar concentration for controlling selectivity of proteins in hydrophobic interaction chromatography
AUTHOR(S): Tani, Hirofumi; Matsubara, Takashi; Kamidate, Tamio
CORPORATE SOURCE: Graduate School of Engineering, Division of Molecular Chemistry, Hokkaido University, Sapporo, 060-8628, Japan
SOURCE: Journal of Chromatography, A (2003), 1016(1), 51-60
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hydrophobic interaction chromatog. (HIC) of proteins using a Ph column has been performed in the presence of various surfactants with micellar and submicellar concentration ranges. Most surfactants were effective for a decrease in the retention of proteins in both concentration ranges. However, the use of anionic cholate derivs. increased the retention of the proteins with high isoelec. point, such as lysozyme, cytochrome c, and trypsin, in submicellar concentration range, and then decreased it above the critical micellar concentration, while the retention of the other proteins was

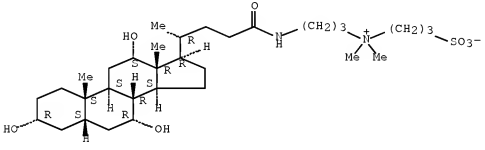
monotonously decreased. The results of frontal chromatog. anal. of the surfactant and capillary electrophoresis for the proteins in the presence of surfactant show that in the submicellar concentration range, cholate derivs. allowed to be adsorbed on the stationary phase, while they exhibited no interactions with the proteins. Thus, it appeared that the increase in the retention of basic proteins was due to the electrostatic attraction between the proteins and cholate-modified stationary phase. We have applied the unique property of cholate to the separation of ovalbumin and lysozyme in egg white sample using hydrophobic chromatog.

IT 75621-03-3, CHAPS
(use of cholate derivs. with submicellar concentration for controlling selectivity of proteins in hydrophobic interaction chromatog.)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 9-3 (Biochemical Methods)
Section cross-reference(s): 6

IT 57-09-0, Cetyltrimethylammonium bromide 145-42-6, Sodium taurocholate 151-21-3, Sds, analysis 302-95-4, Sodium deoxycholate 361-09-1, Sodium cholate 9002-93-1, Triton X-100
75621-03-3, CHAPS
(use of cholate derivs. with submicellar concentration for controlling selectivity of proteins in hydrophobic interaction chromatog.)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Armstrong, D	1981	53	1662	Anal Chem	HCAPLUS
Armstrong, D	1985	14	213	Sep Purific Methods	HCAPLUS
Arunyanart, M	1984	56	1557	Anal Chem	HCAPLUS
Awade, A	1994	677	279	J Chromatogr A	HCAPLUS
Barford, R	1984	56	1554	Anal Chem	HCAPLUS
Barford, R	1982	235	281	J Chromatogr	HCAPLUS
Buckley, J	1989	464	61	J Chromatogr	HCAPLUS
Buckley, J	1990	518	99	J Chromatogr	HCAPLUS
Chang, J	1984	317	157	J Chromatogr	HCAPLUS
Cohen, S	1985	144	275	Anal Biochem	HCAPLUS
Cohen, S	1984	56	217	Anal Chem	HCAPLUS
Fischer, J	1996	681	3	J Chromatogr B	HCAPLUS
Goheen, S	1984	317	55	J Chromatogr	HCAPLUS
Hill, H	1988	170	203	Anal Biochem	HCAPLUS

Huang, J	1987	406	275	J Chromatogr	HCAPLUS
Jacobson, J	1984	316	53	J Chromatogr	HCAPLUS
Jandera, P	1996	728	279	J Chromatogr A	HCAPLUS
Jones, M	1995		143	Micelles, Monolayers	
Malamud, D	1978	86	620	Anal Biochem	HCAPLUS
Meijer, A	1993	635	237	J Chromatogr	HCAPLUS
Otsuka, K	1985	348	39	J Chromatogr	HCAPLUS
Purcell, A	1999	71	2440	Anal Chem	HCAPLUS
Righetti, P	1976	127	1	J Chromatogr	HCAPLUS
Roda, A	1983	258	6362	J Biol Chem	HCAPLUS
Saitoh, T	1996	12	569	Anal Sci	HCAPLUS
Sarnesto, A	1992	267	2737	J Biol Chem	HCAPLUS
Shiraki, K	2002	132	591	J Biochem	HCAPLUS
Sing, Y	1992	598	181	J Chromatogr	HCAPLUS
Stulik, K	1997	352	1	Anal Chim Acta	HCAPLUS
Takagi, T	1980	623	271	Biochim Biophys Acta	HCAPLUS
Terabe, S	1984	56	111	Anal Chem	HCAPLUS
Wetlaufer, D	1986	359	55	J Chromatogr	HCAPLUS
Yang, M	1994	315	438	Arch Biochem Biophys	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:415406 HCAPLUS Full-text
DOCUMENT NUMBER: 139:185118
TITLE: Creation and characteristics of phosphatidylcholine stationary phases for the chromatographic separation of inorganic anions
AUTHOR(S): Hu, Wenzhi; Haddad, Paul R.; Tanaka, Kazuhiko; Mori, Masanobu; Tekura, Kentaro; Hasebe, Kiyoshi; Ohno, Masako; Kamo, Naoki
CORPORATE SOURCE: Graduate School of Science, Division of Chemistry, Hokkaido University, Sapporo, 060-0810, Japan
SOURCE: Journal of Chromatography, A (2003), 997(1-2), 237-242
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB New stationary phases for chromatog. separation of anions, obtained by loading liposomes made from dimyristolyphosphatidylcholine (DMPC) onto reversed-phase packed columns (C18 and C30) are reported. Mono- and divalent anions were used as model analyte ions and retention data for these species were obtained using the DMPC stationary phases and used to elucidate the separation mechanisms involved in this chromatog. system. The DMPC stationary phases can sep. anions by either a solvation-dependent mechanism or an electrostatic ion-exchange mechanism, depending upon the relative magnitudes of the neg. electrostatic potential ($\Psi(-)$) of the phosphate moiety (P-) and the pos. electrostatic potential ($\Psi(+)$) of the quaternary ammonium groups (N+) on the headgroup of DMPC. If $\Psi(+)>\Psi(-)$, such as in case where $\Psi(-)$ has been reduced either by binding of eluent cations (e.g., H+ or divalent cations) onto the P-group of DMPC or by steric screening when a C30 reversed-phase material was used to support the DMPC, then the overall electrostatic surface potential (and hence also the effective anion-exchange capacity) was generally large and the anions were separated on the basis of an electrostatic mechanism. However, if $\Psi(+)$ was similar to $\Psi(-)$, such as in the case of using a C18 reversed-phase support and monovalent cations as eluent cations, then the overall electrostatic surface potential and the effective anion-exchange capacity were very small and the analyte anions were separated on the basis of

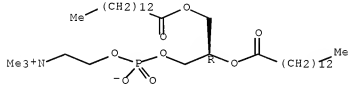
a solvation-dependent mechanism. The DMPC stationary phases are suitable for the direct determination of iodide and thiocyanate in highly saline water samples, such as seawater samples.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(development and characteristics of phosphatidylcholine stationary phases for chromatog. separation of inorg. anions)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 61-3 (Water)
Section cross-reference(s): 79

IT 18194-24-6, Dimyristoylphosphatidylcholine
(development and characteristics of phosphatidylcholine stationary phases for chromatog. separation of inorg. anions)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Clarke, R	1999	76	2614	Biophys J	HCAPLUS
Cook, H	2001	73	3022	Anal Chem	HCAPLUS
Hodgkin, A	1960	153	404	J Physiol (London)	HCAPLUS
Horowicz, P	1964	16	193	Pharmacol Rev	HCAPLUS
Hu, W	1998	35	317	Anal Commun	HCAPLUS
Hu, W	2002	83	3351	Biophys J	HCAPLUS
Hu, W	2000	52	543	Chromatographia	HCAPLUS
Kahn, A	1950	112	647	Science	HCAPLUS
Lillie, R	1910	7	170	Proc Soc Exp Biol Me	
Lindahl, P	1997	23	221	Adv Drug Deliv Rev	
Liu, X	2001	913	123	J Chromatogr A	HCAPLUS
Liu, X	2002	961	113	J Chromatogr A	HCAPLUS
Yang, Q	1999	268	354	Anal Biochem	HCAPLUS
Yoshimoto, M	1998	712	59	J Chromatogr B	HCAPLUS
Zhang, Y	1995	229	291	Anal Biochem	HCAPLUS

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:27054 HCAPLUS Full-text

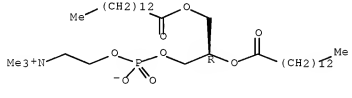
DOCUMENT NUMBER: 139:32677

TITLE: Use of a biomimetic chromatographic stationary phase for study of the interactions occurring between inorganic anions and phosphatidylcholine membranes

AUTHOR(S): Hu, Wenzhi; Haddad, Paul R.; Hasebe, Kiyoshi; Mori, Masanobu; Tanaka, Kazuhiko; Ohno, Masako;

Kamo, Naoki
CORPORATE SOURCE: Division of Chemistry, Graduate School of Science, Hokkaido University, Sapporo, 060-0810, Japan
SOURCE: Biophysical Journal (2002), 83(6), 3351-3356
CODEN: BIOJAU; ISSN: 0006-3495
PUBLISHER: Biophysical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A liquid chromatog. method for the study of ion-membrane interactions is reported. A phosphatidylcholine biomimetic stationary phase was established by loading dimyristoylphosphatidylcholine (DMPC) onto a reversed-phase octadecylsilica packed column. This column was then used to study the interaction of some inorg. anions with the stationary phase by UV and conductivity detection. Ten inorg. anions were selected as model ions and were analyzed with the proposed chromatog. system. Anion-DMPC interactions of differing magnitudes were observed for all of the model anions. Perchlorate-DMPC interactions were strongest, followed by thiocyanate-DMPC, iodide-DMPC, chlorate-DMPC, nitrate-DMPC, bromide-DMPC, chloride-DMPC, fluoride-DMPC, and then sulfate-DMPC. Cations in the eluent, especially H- ions and divalent cations such as Ca2+, showed strong effects on anion-DMPC interactions. The chromatog. data suggest that DMPC interacts with both the anions and the cations. Anion-DMPC interactions were dependent on the surface potential of the stationary phase: at low surface potentials anion-DMPC interactions were predominantly solvation dependent in nature whereas at more pos. surface potentials anion-DMPC interactions were predominantly electrostatic in nature. Cation-DMPC interactions served to raise the surface potential, causing the anion-DMPC interactions to vary from solvation dependent to electrostatic. The chromatog. data were used to provide quant. ests. of the enthalpies of the anion-DMPC interactions.
IT 18194-24-6, Dimyristoylphosphatidylcholine
(biomimetic chromatog. stationary phase for study of interactions occurring between inorg. anions and phosphatidylcholine membranes)
RN 18194-24-6 HCAPLUS
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 9-3 (Biochemical Methods)
IT 18194-24-6, Dimyristoylphosphatidylcholine
(biomimetic chromatog. stationary phase for study of interactions occurring between inorg. anions and phosphatidylcholine membranes)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1997		5	Handbook of chemistr	
Blume, A	1992	31	4636	Biochemistry	HCAPLUS

Buldt, G	1978	271	182	Nature	MEDLINE
Cacace, M	1997	30	241	Q Rev Biophys	MEDLINE
Clarke, R	1999	76	2614	Biophys J	HCAPLUS
Collins, K	1985	18	323	Q Rev Biophys	HCAPLUS
Cook, H	2001	73	3022	Anal Chem	HCAPLUS
Grasdalan, H	1977	469	151	Biochim Biophys Acta	
Hauser, H	1977	468	364	Biochim Biophys Acta	HCAPLUS
Hodgkin, A	1960	153	404	J Physiol (Lond)	HCAPLUS
Horowicz, P	1964	16	193	Pharmacol Rev	HCAPLUS
Hu, W	1993	65	2204	Anal Chem	HCAPLUS
Hu, W	1994	66	2514	Anal Chem	HCAPLUS
Hu, W	1998	35	317	Anal Commun	HCAPLUS
Hu, W	2000	52	543	Chromatographia	HCAPLUS
Hul, W	1999	71	1617	Anal Chem	
Jendrasiak, G	1972	9	133	Chem Phys Lipids	HCAPLUS
Kahn, A	1955	62	139	Ann NY Acad Sci	MEDLINE
Kahn, A	1950	112	647	Science	HCAPLUS
Kalinin, S	2000	46	39	J Biochem Biophys Me	HCAPLUS
Marsh, D	1990			Handbook of Lipid Bi	
Paula, S	1998	74	319	Biophys J	HCAPLUS
Rydall, J	1992	31	1092	Biochemistry	HCAPLUS
Tatulian, S	1983	736	189	Biochim Biophys Acta	MEDLINE
Tatulian, S	1987	170	413	Eur J Biochem	HCAPLUS
Weiss, J	1995			Ion Chromatography,	

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

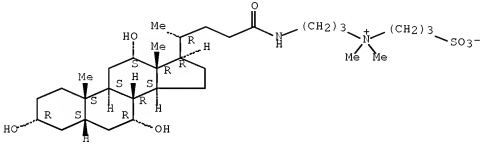
L11 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:126177 HCAPLUS Full-text
DOCUMENT NUMBER: 136:290703
TITLE: The Crystal Structure of Human MRP14 (S100A9), a Ca2+-dependent Regulator Protein in Inflammatory Process
AUTHOR(S): Itou, Hiroshi; Yao, Min; Fujita, Ikuko; Watanabe, Nobuhisa; Suzuki, Masaki; Nishihira, Jun; Tanaka, Isao
CORPORATE SOURCE: Division of Biological Sciences Graduate School of Science, Hokkaido University, Sapporo, 060-0810, Japan
SOURCE: Journal of Molecular Biology (2002), 316(2), 265-276
CODEN: JMOBAK; ISSN: 0022-2836
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Human MRP14 (hMRP14) is a Ca2+-binding protein from the S100 family of proteins. This protein is co-expressed with human MRP8 (hMRP8), a homolog protein in myeloid cells, and plays an indispensable role in Ca2+-dependent functions during inflammation. This role includes the activation of Mac-1, the β2 integrin which is involved in neutrophil adhesion to endothelial cells. The crystal structure of the holo form of hMRP14 was analyzed at 2.1 Å resolution HMRP14 is distinguished from other S100 member proteins by its long C-terminal region, and its structure shows that the region is extensively flexible. In this crystal structure of hMRP14, Chaps mols. bind to the hinge region that connects two EF-hand motifs, which suggests that this region is a target-binding site of this protein. Based on a structural comparison of hMRP14 with hMRP8 and human S100A12 (hS100A12) that is another homolog protein, the character of MRP8/14 hetero-complex and the functional significance of the flexibility of the C-terminal region of hMRP14 are discussed. (c) 2002 Academic Press.

IT 75621-03-3, Chaps
(hydrophobic patch formed among hinge region and helixes H3 and H4 of human MRP14 may participate in target-binding site)
RN 75621-03-3 HCAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 6-3 (General Biochemistry)
Section cross-reference(s): 75
IT 75621-03-3, Chaps
(hydrophobic patch formed among hinge region and helixes H3 and H4 of human MRP14 may participate in target-binding site)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abrahams, J	1996	52	30	Acta Crystallog sect	MEDLINE
Aguiar-Passeti, T	1997	62	852	J Leuk Biol	HCAPLUS
Akiyama, H	1994	50	195	J Neuroimmunol	MEDLINE
Bairoch, A	2000	28	45	Nucl Acids Res	HCAPLUS
Berman, H	2000	28	235	Nucl Acids Res	HCAPLUS
Bhardwaj, R	1992	22	1891	Eur J Immunol	HCAPLUS
Brodersen, D	1998	6	477	Structure	HCAPLUS
Brun, J	1994	21	733	J Rheumatol	MEDLINE
Brunger, A	1998	54	905	Acta Crystallog sect	MEDLINE
Burmeister, G	1986	171	461	Immunobiology	HCAPLUS
Collaborative Computati	1994	50	760	Acta Crystallog sect	
Cowtain, K	1996	52	43	Acta Crystallog sect	
Delabie, J	1990	81	123	Clin Exp Immunol	MEDLINE
Donato, R	1999	1450	191	Biochim Biophys Acta	HCAPLUS
Edgeworth, J	1991	266	7706	J Biol Chem	HCAPLUS
Edgeworth, J	1989	342	189	Nature	HCAPLUS
Evans, P	1997		97	Proc CCP4 Study Week	
Freemont, P	1989	339	516	Nature	HCAPLUS
Goebeler, M	1994	58	355	Transplantation	HCAPLUS
Goetzl, E	1972	146	1564	J Exp Med	
Hessian, P	2001	268	353	Eur J Biochem	HCAPLUS
Hessian, P	1995	371	271	FEBS Letters	HCAPLUS
Hunter, M	1998	273	12427	J Biol Chem	HCAPLUS
Ishikawa, K	2000	56	559	Acta Crystallog sect	MEDLINE
Itou, H	2001	58	1174	Acta Crystallog sect	
Johnsson, N	1990	265	14464	J Biol Chem	HCAPLUS

Jones, T	1991	47	110	Acta Crystallog sect	
Kelly, S	1989	49	17	J Pathol	
Kerkhoff, C	2001	40	241	Biochemistry	HCAPLUS
Kerkhoff, C	1998	1448	200	Biochim Biophys Acta	HCAPLUS
Kerkhoff, C	1999	274	32672	J Biol Chem	HCAPLUS
Kilby, P	1997	6	2494	Protein Sci	HCAPLUS
Klempt, M	1997	408	81	FEBS Letters	HCAPLUS
Kleywegt, G	1998	54	1119	Acta Crystallog sect	MEDLINE
Kligman, D	1988	13	437	Trends Biochem Sci	HCAPLUS
Kraulis, P	1991	24	946	J Appl Crystallog	
Kube, E	1992	267	14175	J Biol Chem	HCAPLUS
La Fortelle, E	1997	276	472	Methods Enzymol	
Lagasse, E	1988	8	2402	Mol Cell Biol	HCAPLUS
Laskowski, R	1993	26	283	J Appl Crystallog	HCAPLUS
Leslie, A	1993		44	Proc CCP4 Study Week	
Matsumura, H	1998	6	233	Structure	HCAPLUS
Matthews, B	1968	33	491	J Mol Biol	HCAPLUS
Merritt, E	1997	277	505	Methods Enzymol	HCAPLUS
Moroz, O	2001	57	20	Acta Crystallog sect	MEDLINE
Murao, S	1989	264	8356	J Biol Chem	HCAPLUS
Nacken, W	2000	267	560	Eur J Biochem	HCAPLUS
Newton, R	1998	160	1427	J Immunol	HCAPLUS
Nicholls, A	1991	11	281	Proteins Struct Func	HCAPLUS
Odink, K	1987	330	80	Nature	HCAPLUS
Osterloh, D	1998	24	137	Cell Calcium	HCAPLUS
Propper, C	1999	274	183	J Biol Chem	HCAPLUS
Rety, S	1999	6	89	Nature Struct Biol	HCAPLUS
Rety, S	2000	8	175	Structure	HCAPLUS
Robinson, M	2000	175	865	Biochem Biophys Res	
Roth, J	1993	82	1875	Blood	HCAPLUS
Roth, J	1992	186	304	Immunobiology	HCAPLUS
Roulin, K	1999	247	410	Exp Cell Res	HCAPLUS
Rugtweit, J	1994	35	669	Gut	
Sastry, M	1998	6	223	Structure	HCAPLUS
Sheldrick, G	1993	49	18	Acta Crystallog sect	MEDLINE
Siegenthaler, G	1997	272	9371	J Biol Chem	HCAPLUS
Smith, S	1998	6	211	Structure	HCAPLUS
Sunderkotter, C	1991	138	931	Am J Pathol	MEDLINE
Szebenyi, D	1986	261	8761	J Biol Chem	HCAPLUS
Teigelkamp, S	1991	266	13462	J Biol Chem	HCAPLUS
van den Bos, C	1996	156	1247	J Immunol	HCAPLUS
Vogl, T	1999	274	25291	J Biol Chem	HCAPLUS
Watt, K	1983	48	79	Immunobiology	HCAPLUS
Zwadlo, G	1988	72	510	Clin Exp Immunol	HCAPLUS

OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

L11 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:1212 HCAPLUS Full-text

DOCUMENT NUMBER: 128:140122

ORIGINAL REFERENCE NO.: 128:27559a,27562a

TITLE: Phagostimulant activity of phosphatidylcholine molecular species for young abalone Haliotis discus hannai

AUTHOR(S): Ando, Yasuhiro; Nakamura, Jun-Ichi; Ota, Toru

CORPORATE SOURCE: Department of Marine Bioresources Chemistry, Faculty of Fisheries, Hokkaido University, Hakodate, 041, Japan

SOURCE: Fisheries Science (1997), 63(6), 1048-1049
CODEN: FSCIEH; ISSN: 0919-9268

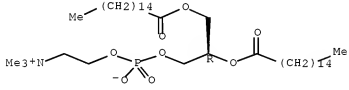
PUBLISHER: Japanese Society of Fisheries Science
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Phagostimulant activities of phosphatidylcholine mol. species varied with young abalone, Haliotis discus hannai, higher values generally given by unsatd. mol. species and mol. species containing different unsatd. fatty acid moieties as compared with saturated mol. species.

IT 63-89-8 816-94-4
(phagostimulant activity of phosphatidylcholine mol. species for young abalone Haliotis discus hannai)

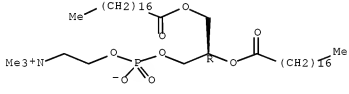
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 18-7 (Animal Nutrition)
Section cross-reference(s): 12

IT 63-89-8 816-94-4 4235-95-4 7276-38-2
10589-48-7 17708-90-6 26853-31-6 27098-24-4 35418-57-6
56421-10-4 59403-51-9 59491-62-2
(phagostimulant activity of phosphatidylcholine mol. species for young abalone Haliotis discus hannai)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Ackman, R	1981		189	New Sources of Fats	HCAPLUS
Araki, S	1987	28	761	Plant Cell Physiol	HCAPLUS
Kayama, M	1989	2	3	Marine Biogenic Lipi	
Rullkotter, J	1975	76	163	Z Pflanzenphysiol Bd	

Sakata, K	1983	47	2957	Agric Biol Chem	HCAPLUS
Sakata, K	1984	48	425	Agric Biol Chem	
Sakata, K	1988	14	1405	J Chem Ecol	HCAPLUS
Sakata, K	1991	17	185	J Chem Ecol	HCAPLUS
Sakata, K	1986	91	509	Mar Biol	
Sakata, K	1985	51	659	Nippon Suisan Gakkai	HCAPLUS
Sakata, K	1988	54	1715	Nippon Suisan Gakkai	
Takagi, T	1985	34	1008	Yukagaku	HCAPLUS

L11 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:424158 HCAPLUS Full-text
DOCUMENT NUMBER: 127:199292
ORIGINAL REFERENCE NO.: 127:38479a,38482a
TITLE: A novel ion chromatographic method using zwitterionic surfactants as the stationary phase and water as the mobile phase
AUTHOR(S): Hu, Wenzhi; Hasebe, Kiyoshi; Reynolds, Darren Michael; Umemura, Tomonari; Kamiya, Shinji; Itoh, Akihide; Haraguchi, Hiroki
CORPORATE SOURCE: Division of Chemistry, Graduate School of Science, Hokkaido University, Sapporo, 060, Japan
SOURCE: Journal of Liquid Chromatography & Related Technologies (1997), 20(12), 1903-1919
CODEN: JLCTFC; ISSN: 1082-6076
PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English

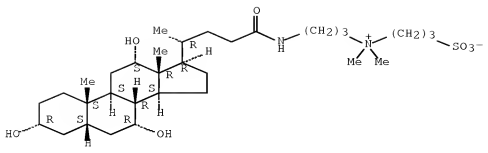
AB Zwitterionic surfactants immobilized on the surfaces of octadecylsilica (ODS) are used for the stationary phase and water as the mobile phase for the ion chromatog. (IC) of target analytes. The creation of an elec. double layer (EDL), when a zwitterionic stationary phase is in contact with the analyte ions, is proposed to explain the separation mechanism. When an EDL is created using a zwitterionic stationary phase (ZWEDL), its properties differ considerably to those of a single charge-fixed stationary phase created EDL. For a ZWEDL, (i) the electrostatic field is increased, resulting in the simultaneous retention and separation of both cations and anions; (ii) the electrostatic affinity between the analytes in the ZWEDL and the stationary phase is extremely weak. This results in the effective distribution of the analytes between the stationary phase and the mobile phase without the need for ion-exchange. Since only water is used for the mobile phase, the sensitivity of detection by conductivity is vastly improved and the direct determination (without pre-concentration) of inorg. ions at ultra low levels is possible. Also, since both pos. and neg. electrostatic fields are produced simultaneously, both analyte cations and anions are retained and separated in a single stage of the stationary phase. This provides the basis for a simple and rapid chromatog. method for the simultaneous anal. of cations and anions.

IT 75621-03-3, CHAPS
(salts determination in water by ion chromatog. using zwitterionic surfactants as stationary phase and water as mobile phase)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.

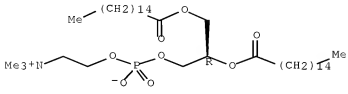


CC 79-4 (Inorganic Analytical Chemistry)
Section cross-reference(s): 61
IT 14933-09-6, Zwittergent-3-14 75621-03-3, CHAPS
(salts determination in water by ion chromatog. using zwitterionic surfactants as stationary phase and water as mobile phase)
OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L11 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:626367 HCAPLUS Full-text
DOCUMENT NUMBER: 126:1509
ORIGINAL REFERENCE NO.: 126:355a,358a
TITLE: Structural differences in the ability of lysophospholipids to inhibit endothelium-dependent hyperpolarization by acetylcholine in rat mesenteric arteries
AUTHOR(S): Fukao, Mitsuhiro; Hattori, Yuichi; Kanno, Morio; Sakuma, Ichiro; Kitabatake, Akira
CORPORATE SOURCE: School of Medicine, Hokkaido University, Sapporo, 060, Japan
SOURCE: Biochemical and Biophysical Research Communications (1996), 227(2), 479-483
CODEN: BBRCA9; ISSN: 0006-291X
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of different lysophospholipids on endothelium-dependent hyperpolarization by acetylcholine were examined in rat mesenteric arteries. Lysophosphatidylcholine with a ≥14-carbon acyl chain significantly inhibited the hyperpolarization, whereas that with a ≤12-carbon acyl chain was without effect. Lysophosphatidylcholine with an unsatd. acyl chain also showed a potent inhibition. Lysophosphatidylinositol and lyso-platelet activating factor, but not phosphatidylcholine, lysophosphatidic acid, lysophosphatidylethanolamine, or lysophosphatidylserine, suppressed the hyperpolarization. These results suggest that the length of the carbon acyl chain and the size of the polar head group may be crucial for the effects of lysophospholipids on endothelium-dependent hyperpolarization. Accumulation of these lysophospholipids may play an important role in endothelial dysfunction associated with atherosclerosis.
IT 63-89-8, Dipalmitoylphosphatidylcholine
(structural differences in ability of lysophospholipids to inhibit endothelium-dependent hyperpolarization by acetylcholine in rat mesenteric arteries)
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium,

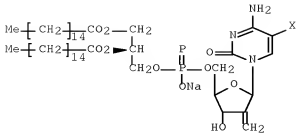
4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 2-8 (Mammalian Hormones)
IT 63-89-8, Dipalmitoylphosphatidylcholine 7220-34-0
17364-16-8, C16 Lysophosphatidylcholine 19420-56-5 19420-57-6
20559-16-4 20559-18-6 22248-63-1 45287-18-1 53862-35-4
58445-96-8 108728-68-3, Lyso-platelet activating factor
112573-74-7 116947-34-3
(structural differences in ability of lysophospholipids to inhibit endothelium-dependent hyperpolarization by acetylcholine in rat mesenteric arteries)
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L11 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:604550 HCAPLUS Full-text
DOCUMENT NUMBER: 125:329252
ORIGINAL REFERENCE NO.: 125:61691a
TITLE: Nucleosides and nucleotides. 155. Synthesis, antitumor effects, and possible enzymic activation mechanism of 5'-phosphatidyl-2'deoxy-2'-methylenecytidine (DMDC)
AUTHOR(S): Shuto, Satoshi; Awano, Hirokazu; Fujii, Akihiro; Yamagami, Keiji; Matsuda, Akira
CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Hokkaido University, Sapporo, 060, Japan
SOURCE: Bioorganic & Medicinal Chemistry Letters (1996), 6(18), 2177-2182
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

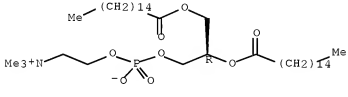
AB 2'-Deoxy-2'methylenecytidine (DMDC) and its 5-fluoro congener (5-F-DMDC), potent antitumor nucleosides developed by us, were efficiently converted to their 5'-phosphatidyl derivs. bearing palmitoyl residues I (X = F, H) as novel antitumor phospholipids by phospholipase D-catalyzed trans-phosphatidylation. These phospholipids I, when administered i.p., remarkably prolonged the life-span of mice which were i.p.-inoculated with M5076 sarcoma, and the effects were clearly superior to that of DMDC. I (X = H) was a good substrate for phospholipase A2 from bovine pancreas as well as phospholipase D from Streptomyces, while it was slightly hydrolyzed by phospholipase C from Bacillus cereus.

IT 63-89-8, Dipalmitoyl phosphatidylcholine
(preparation and virucidal activity of phosphatidyldeoxymethylenecytidine)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 33-9 (Carbohydrates)
Section cross-reference(s): 1, 6, 7

IT 63-89-8, Dipalmitoyl phosphatidylcholine 129531-96-0
(preparation and virucidal activity of phosphatidyldeoxymethylenecytidine)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:543825 HCAPLUS Full-text

DOCUMENT NUMBER: 123:28774

ORIGINAL REFERENCE NO.: 123:5241a,5244a

TITLE: Fluidity of glycerol skeletal region in phospholipid bilayers: a time-resolved fluorescence depolarization study

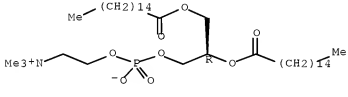
AUTHOR(S): Araiso, Tsunehisa; Koyama, Tomiyasu
CORPORATE SOURCE: Research Institute for Electronic Science, Hokkaido University, Sapporo, 060, Japan
SOURCE: Japanese Journal of Physiology (1995), 45(1), 187-96
CODEN: JJPHAM; ISSN: 0021-521X
PUBLISHER: Business Center for Academic Societies Japan
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The title study used L-α-dihexadecanoyl-sn-glycero-3-phospho-[N- (4-nitrobenzo-2-oxa-1,3- diazole)]ethanolamine (NBD-PE) as a fluorescent probe. In this probe, the fluorescent moiety, 4-nitrobenz-2-oxa-1,3-diazole (NBD), is attached to a nitrogen atom at the polar head group of a phosphatidylethanolamine mol. When this probe is embedded in a lipid bilayer, the NBD moiety locates near the glycerol skeletal region. The time courses of fluorescence anisotropy of NBD-PE in dipalmitoylphosphatidylcholine (DPPC) and dimyristoylphosphatidylcholine (DMPC) bilayers were analyzed by using a wobbling-in-cone model, in which the mol. motion is characterized by a half cone angle (θc) and a wobbling diffusion rate (Dw). Values of Dw of NBD moiety in phospholipid bilayers were on the order of 10^7 s-1 at physiol. temps., which is almost the same value as that of the hydrocarbon chain in lipid bilayers. This fact indicates that the fluidity in the glycerol skeletal region is similar to that in the hydrocarbon layer.

IT 63-89-8, Dipalmitoylphosphatidylcholine 18194-24-6
, Dimyristoylphosphatidylcholine
(fluidity of glycerol skeletal region in phospholipid bilayers study by time-resolved fluorescence depolarization)

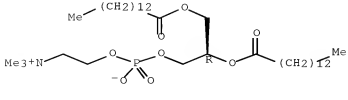
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 18194-24-6 HCAPLUS
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 9-5 (Biochemical Methods)
Section cross-reference(s): 6
IT 63-89-8, Dipalmitoylphosphatidylcholine 18194-24-6
, Dimyristoylphosphatidylcholine
(fluidity of glycerol skeletal region in phospholipid bilayers study by time-resolved fluorescence depolarization)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

=> D L27 1-60 IBIB ABS HITSTR HITIND RETABLE

L27 ANSWER 1 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1045223 HCAPLUS Full-text
DOCUMENT NUMBER: 149:299774
TITLE: RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid
INVENTOR(S): McSwiggen, James; Morrissey, David; Guerciolini, Roberto; Vargeese, Chandra; Jadhav, Vasant
PATENT ASSIGNEE(S): Sirna Therapeutics, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 199pp., Cont.-in-part of U.S. Ser. No. 311,826.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 261
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080207542	A1	20080828	US 2006-510872 <--	20060825
AU 9851819	A	19980611	AU 1998-51819 <--	19980112
AU 729657	B2	20010208		
AU 9939188	A	19990916	AU 1999-39188 <--	19990713
AU 769175	B2	20040115	AU 2000-56616 <--	20000911
WO 2002081494	A1	20021017	WO 2002-US9187 <--	20020326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2003070750	A2	20030828	WO 2003-US5043 <--	20030220
WO 2003070750	A3	20040318		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

US	20040209831	A1	20041021	US 2003-667271	20030916
				<--	
US	20050209180	A1	20050922	US 2004-942560	20040915
				<--	
US	20060211642	A1	20060921	US 2005-311826	20051219
				<--	
AU	2006203062	A1	20060810	AU 2006-203062	20060713
				<--	
AU	2006203062	B2	20090312		
AU	2006203725	A1	20060914	AU 2006-203725	20060825
				<--	
AU	2006228026	A1	20061102	AU 2006-228026	20061011
				<--	
AU	2006330660	A1	20070705	AU 2006-330660	20061218
CA	2633684	A1	20070705	CA 2006-2633684	20061218
WO	2007076328	A2	20070705	WO 2006-US62252	20061218
WO	2007076328	A3	20080814		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY,
MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV,
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

EP	1987145	A2	20081105	EP 2006-846665	20061218

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,
TR, AL, BA, HR, MK, RS

JP	2009520039	T	20090521	JP 2008-547707	20061218
MX	2008007963	A	20080827	MX 2008-7963	20080618
KR	2008079329	A	20080829	KR 2008-717733	20080718
NO	2008003208	A	20080918	NO 2008-3208	20080718

PRIORITY APPLN. INFO.:

WO 2002-US9187	A2	20020326
<--		
US 2002-401104P	P	20020805
<--		
WO 2003-US5043	A2	20030220
<--		
US 2003-667271	A2	20030916
<--		
US 2004-942560	B2	20040915
US 2005-311826	B2	20051219
AU 1995-26422	A3	19950518

<--
US 1996-623891 A 19960325
<--
AU 1996-76662 A3 19961025
<--
US 2001-817879 A 20010326
<--
US 2001-292217P P 20010518
<--
US 2001-296876P P 20010608
<--
US 2001-877478 A 20010608
<--
US 2001-306883P P 20010720
<--
US 2001-311865P P 20010813
<--
US 2001-335059P P 20011024
<--
US 2001-337055P P 20011205
<--
US 2002-358580P P 20020220
<--
US 2002-362016P P 20020306
<--
US 2002-363124P P 20020311
<--
WO 2002-US15876 A2 20020520
<--
US 2002-386782P P 20020606
<--
US 2002-406784P P 20020829
<--
US 2002-408378P P 20020905
<--
US 2002-409293P P 20020909
<--
US 2003-440129P P 20030115
<--
AU 2003-216323 A3 20030220
<--
AU 2003-219817 A3 20030220
<--
AU 2003-221258 A3 20030220
<--
WO 2003-US5028 A2 20030220
<--
WO 2003-US5346 A2 20030220
<--
US 2003-427160 A2 20030430
<--
US 2003-444853 A2 20030523
<--
US 2003-693059 A2 20031023
<--
US 2003-720448 A2 20031124
<--
US 2003-727780 A2 20031203
<--
US 2004-757803 A2 20040114

US 2004-543480P	P	20040210
US 2004-780447	A2	20040213
US 2004-826966	A2	20040416
WO 2004-US13456	A2	20040430
WO 2004-US16390	A2	20040524
WO 2005-US4270	A2	20050209
US 2005-678531P	P	20050506
US 2005-703946P	P	20050729
US 2005-737024P	P	20051115
US 2006-510872	A	20060825
WO 2006-US62252	W	20061218

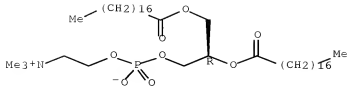
AB The present invention relates to compds., compns., and methods for the study, diagnosis, and treatment of traits, diseases and conditions that respond to the modulation of gene expression and/or activity. The present invention is also directed to compds., compns., and methods relating to traits, diseases and conditions that respond to the modulation of expression and/or activity of genes involved in gene expression pathways or other cellular processes that mediate the maintenance or development of such traits, diseases and conditions. Specifically, the invention relates to double stranded nucleic acid mols. including small nucleic acid mols., such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) mols. capable of mediating RNA interference (RNAi) against gene expression, including cocktails of such small nucleic acid mols. and lipid nanoparticle (LNP) formulations of such small nucleic acid mols. The present invention also relates to small nucleic acid mols., such as siNA, siRNA, and others that can inhibit the function of endogenous RNA mols., such as endogenous micro-RNA (miRNA) (e.g, miRNA inhibitors) or endogenous short interfering RNA (siRNA), (e.g., siRNA inhibitors) or that can inhibit the function of RISC (e.g., RISC inhibitors), to modulate gene expression by interfering with the regulatory function of such endogenous RNAs or proteins associated with such endogenous RNAs (e.g., RISC), including cocktails of such small nucleic acid mols. and lipid nanoparticle (LNP) formulations of such small nucleic acid mols. Such small nucleic acid mols. and are useful, for example, in providing compns. to prevent, inhibit, or reduce diseases, traits and conditions that are associated with gene expression or activity in a subject or organism.

IT 816-94-4, DSPC
(RNAi formulations containing; RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid)

RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



INCL 514044000
CC 1-5 (Pharmacology)
Section cross-reference(s): 3
IT Surfactants
(RNAi formulations containing; RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid)
IT 57-88-5, Cholesterol, biological studies 112-92-5, Stearyl alcohol 143-28-2, Oleyl alcohol 506-43-4, Linoleyl alcohol 816-94-4, DSPC 25322-68-3D, PEG, conjugates with lipids 36653-82-4, Palmityl alcohol 908860-82-2, CLinDMA 908860-83-3, PCLinDMA 908860-84-4, ECLinDMA 908860-85-5, DMOBA 908860-86-6, DMLBA 908860-87-7 908860-89-9D, conjugates with PEG 942219-89-8D, conjugates with PEG
(RNAi formulations containing; RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid)

L27 ANSWER 2 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:708759 HCAPLUS Full-text
DOCUMENT NUMBER: 149:38846
TITLE: Liposomal curcumin for treatment of diseases including cancer
INVENTOR(S): Kurzrock, Razelle; Li, Lan; Mehta, Kapil; Aggarawal, Bharat Bhushan; Helson, Lawrence
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System, USA
SOURCE: U.S. Pat. Appl. Publ., 42pp., Cont.-in-part of U.S. Ser. No. 868,251.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080138400	A1	20080612	US 2007-949027	20071201
WO 2004080396	A2	20040923	WO 2004-US6832 <--	20040305
WO 2004080396	A3	20041202		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 20060067998	A1	20060330	US 2005-221179	20050907
US 20080103213	A1	20080501	US 2007-868251	20071005
PRIORITY APPLN. INFO.:			WO 2004-US6832	A 20040305
			US 2005-221179	A2 20050907
			US 2007-868251	A2 20071005
			US 2003-452630P	P 20030307

<--

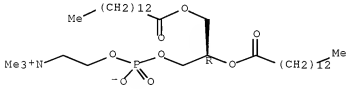
AB The present invention provides compns. and methods for the treatment of a human patient. The methods and compns. of the present invention include composition for the efficient loading of curcumin, comprising: an amount of a curcuminoid:liposome complex effective to load curcumin into the liposome, wherein the curcuminoids has between 2 to 9 weight% of the total composition and the curcuminoids are natural or synthetic. Thus, liposomal curcumin was formulated using the following protocol: phospholipid, 1,2-dimyristoyl-sn-glycero-3-phosphocholine (DMPC) was solubilized by dissolving 200 mg of DMPC in 10 mL of t-butanol and heating in a 37° water bath for 5 min; the solution was stored at -20° in a container that protected the solution from exposure to light. Curcumin was solubilized by dissolving curcumin in DMSO to a final concentration of 50 mg/mL; the solution was also aliquoted and stored in a container that protected the solution from exposure to light. To combine the phospholipid and curcumin solns., 10 mL of DMPC in t-butanol, 0.4 mL curcumin in DMSO and 90 mL of t-butanol were mixed very well and aliquoted into small sterile glass vials containing 2.5 mL of solution each; the vials of solution were frozen in a dry ice-acetone bath and lyophilized; the dried lipid mixts. were stored at -20°. Prior to use, the desired amount of 0.9% NaCl was used to resuspend the lipid mixts.

IT 18194-24-6, DMPC
(liposomal curcumin for treatment of diseases including cancer)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.

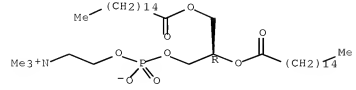


IT 63-89-8, DPPC
(liposomal curcumin for treatment of diseases including cancer)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



INCL 424450000; 514679000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
IT Alzheimer disease
Amyotrophic lateral sclerosis
Anaphylaxis
Anti-inflammatory agents
Antimalarials
Arthritis
Autoimmune disease
Brain, neoplasm
Cataract
Cervix, neoplasm
Colorectal neoplasm
Connective tissue disease
Dementia
Esophagus, neoplasm
Filariasis
Freeze-dried drug delivery systems
Head and Neck, neoplasm
Hemochromatosis
Hookworm
Human
Irritable bowel syndrome
Leishmaniasis
Leukemia
Liver, neoplasm
Lung, neoplasm
Lymphoma
Mammary gland, neoplasm
Muscle, disease
Neoplasm
Neurodegenerative disease
Neurofibromatosis
Pancreas, neoplasm
Parasitic infection
Parenteral drug delivery systems
Parkinson's disease
Pharmaceutical colloids
Pharmaceutical liposomes
Plasmodium falciparum
Prostate gland, neoplasm
Schistosoma mansoni
Schistosomiasis
Skin, neoplasm
Stomach, neoplasm
Treponema

Vagina, neoplasm
(liposomal curcumin for treatment of diseases including cancer)
IT Encapsulation
(nanoencapsulation; liposomal curcumin for treatment of diseases including cancer)
IT 57-88-5, Cholesterol, biological studies 120-46-7, Dibenzoylmethane 458-37-7, Curcumin 458-37-7D, Curcumin, derivs. 1080-12-2, Feruloylmethane 18194-24-6, DMPC 22608-11-3, Demethoxycurcumin 33171-05-0, Bisdemethoxycurcumin 36062-04-1, Tetrahydrocurcumin 36557-16-1, Sodium curcuminate 38142-58-4 94875-80-6 170931-04-1, DSPE-PEG 211567-66-7, DMPE-PEG 855895-01-1 1030352-57-8
(liposomal curcumin for treatment of diseases including cancer)
IT 63-89-8, DPPC 124-30-1, Stearylamine 4235-95-4, DOPC 185463-22-3, DMPG
(liposomal curcumin for treatment of diseases including cancer)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 3 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:529113 HCAPLUS Full-text
DOCUMENT NUMBER: 148:487159
TITLE: Liposomal curcumin for treatment of neurofibromatosis
INVENTOR(S): Kurzrock, Razelle; Li, Lan; Mehta, Kapil; Aggarwal, Bharat Bhushan
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System, USA
SOURCE: U.S. Pat. Appl. Publ., 30pp., Cont.-in-part of U.S. Ser. No. 221,179.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080103213	A1	20080501	US 2007-868251	20071005
WO 2004080396	A2	20040923	WO 2004-US6832 <--	20040305
WO 2004080396	A3	20041202		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20060067998	A1	20060330	US 2005-221179	20050907
US 20080138400	A1	20080612	US 2007-949027	20071201

PRIORITY APPLN. INFO.:

WO 2004-US6832	A	20040305
US 2005-221179	A2	20050907

US 2003-452630P P 20030307
<--
US 2007-868251 A2 20071005

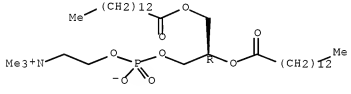
AB The present invention provides a compns. and methods for the treatment of Neurofibromatosis Type 1 and 2, in a human patient. The methods and compns. of the present invention employ curcumin or a curcumin analog encapsulated in a colloidal drug delivery system, preferably a liposomal drug delivery system to target Merlin and proteins of the Merlin pathway. Suitable colloidal drug delivery systems also include nanoparticles, nanocapsules, microparticles or block copolymer micelles. The colloidal drug delivery system encapsulating curcumin or a curcumin analog is administered parenterally in a pharmaceutically acceptable carrier.

IT 18194-24-6, DMPC
(liposomal curcumin for treatment of neurofibromatosis)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



INCL 514679000

CC 1-6 (Pharmacology)
Section cross-reference(s): 63

IT Polymers, biological studies
(-based colloidal drug delivery system; liposomal curcumin for treatment of neurofibromatosis)

IT Drug delivery systems
(colloidal; liposomal curcumin for treatment of neurofibromatosis)

IT Antitumor agents
Human
Mammalia
Neurofibromatosis
Neurofibromatosis 1
Neurofibromatosis 2
Parenteral drug delivery systems
Pharmaceutical liposomes
Pharmaceutical microparticles
Pharmaceutical microspheres
Pharmaceutical nanocapsules
Pharmaceutical nanoparticles
Pharmaceutical nanospheres
(liposomal curcumin for treatment of neurofibromatosis)

IT 57-88-5, Cholesterol, biological studies 18194-24-6, DMPC 20255-95-2, Dimyristoyl phosphatidylethanolamine 25322-68-3, PEG
(liposomal curcumin for treatment of neurofibromatosis)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS

RECORD (1 CITINGS)

L27 ANSWER 4 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:730983 HCAPLUS Full-text
DOCUMENT NUMBER: 147:110176
TITLE: RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid
INVENTOR(S): McSwiggen, James; Morrissey, David; Guerciolini, Roberto; Vargeese, Chandra; Jadhav, Vasant
PATENT ASSIGNEE(S): Sirna Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 361pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 261
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007076328	A2	20070705	WO 2006-US62252	20061218
WO 2007076328	A3	20080814		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 9851819	A	19980611	AU 1998-51819 <--	19980112
AU 729657	B2	20010208		
AU 9939188	A	19990916	AU 1999-39188 <--	19990713
AU 769175	B2	20040115	AU 2000-56616 <--	20000911
US 20060211642	A1	20060921	US 2005-311826 <--	20051219
AU 2006203062	A1	20060810	AU 2006-203062 <--	20060713
AU 2006203062	B2	20090312		
AU 2006203725	A1	20060914	AU 2006-203725 <--	20060825
US 20080207542	A1	20080828	US 2006-510872 <--	20060825
AU 2006228026	A1	20061102	AU 2006-228026 <--	20061011
AU 2006330660	A1	20070705	AU 2006-330660	20061218
CA 2633684	A1	20070705	CA 2006-2633684	20061218
EP 1987145	A2	20081105	EP 2006-846665	20061218
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
JP 2009520039	T	20090521	JP 2008-547707	20061218
IN 2008CN03038	A	20090306	IN 2008-CN3038	20080617

MX 2008007963	A	20080827	MX 2008-7963		20080618
KR 2008079329	A	20080829	KR 2008-717733		20080718
NO 2008003208	A	20080918	NO 2008-3208		20080718
PRIORITY APPLN. INFO.:			US 2005-311826	A	20051219
			US 2006-510872	A	20060825
			AU 1995-26422	A3	19950518
			<--		
			US 1996-623891	A	19960325
			<--		
			AU 1996-76662	A3	19961025
			<--		
			US 2001-292217P	P	20010518
			<--		
			US 2001-306883P	P	20010720
			<--		
			US 2001-311865P	P	20010813
			<--		
			US 2002-358580P	P	20020220
			<--		
			US 2002-362016P	P	20020306
			<--		
			US 2002-363124P	P	20020311
			<--		
			WO 2002-US9187	A2	20020326
			<--		
			WO 2002-US15876	A2	20020520
			<--		
			US 2002-386782P	P	20020606
			<--		
			US 2002-401104P	P	20020805
			<--		
			US 2002-406784P	P	20020829
			<--		
			US 2002-408378P	P	20020905
			<--		
			US 2002-409293P	P	20020909
			<--		
			US 2003-440129P	P	20030115
			<--		
			AU 2003-216323	A3	20030220
			<--		
			AU 2003-219817	A3	20030220
			<--		
			AU 2003-221258	A3	20030220
			<--		
			WO 2003-US5028	A2	20030220
			<--		
			WO 2003-US5043	A2	20030220
			<--		
			WO 2003-US5346	A2	20030220
			<--		
			US 2003-427160	A2	20030430
			<--		
			US 2003-444853	A2	20030523
			<--		
			US 2003-667271	A2	20030916
			<--		
			US 2003-693059	B2	20031023

		<--	
US	2003-720448	B2	20031124
		<--	
US	2003-727780	A2	20031203
		<--	
US	2004-757803	A2	20040114
US	2004-543480P	P	20040210
US	2004-780447	A2	20040213
US	2004-826966	A2	20040416
WO	2004-US13456	A2	20040430
WO	2004-US16390	A2	20040524
US	2004-942560	A2	20040915
WO	2005-US4270	A2	20050209
US	2005-678531P	P	20050506
US	2005-703946P	P	20050729
US	2005-737024P	P	20051115
WO	2006-US62252	W	20061218

AB The present invention relates to compds., compns., and methods for the study, diagnosis, and treatment of traits, diseases and conditions that respond to the modulation of gene expression and/or activity. The present invention is also directed to compds., compns., and methods relating to traits, diseases and conditions that respond to the modulation of expression and/or activity of genes involved in gene expression pathways or other cellular processes that mediate the maintenance or development of such traits, diseases and conditions. Specifically, the invention relates to double stranded nucleic acid mols. including small nucleic acid mols., such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) mols. capable of mediating RNA interference (RNAi) against gene expression, including cocktails of such small nucleic acid mols. and lipid nanoparticle (LNP) formulations of such small nucleic acid mols. The present invention also relates to small nucleic acid mols., such as siNA, siRNA, and others that can inhibit the function of endogenous RNA mols., such as endogenous micro-RNA (miRNA) (e.g, miRNA inhibitors) or endogenous short interfering RNA (siRNA), (e.g., siRNA inhibitors) or that can inhibit the function of RISC (e.g., RISC inhibitors), to modulate gene expression by interfering with the regulatory function of such endogenous RNAs or proteins associated with such endogenous RNAs (e.g., RISC), including cocktails of such small nucleic acid mols. and lipid nanoparticle (LNP) formulations of such small nucleic acid mols. Such small nucleic acid mols. and are useful, for example, in providing compns. to prevent, inhibit, or reduce diseases, traits and conditions that are associated with gene expression or activity in a subject or organism.

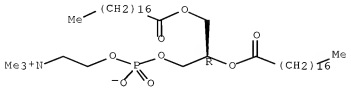
IT 816-94-4, DSPC
(RNAi formulations containing; RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid)

RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium,

4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

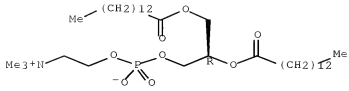
Absolute stereochemistry.



CC 1-5 (Pharmacology)
Section cross-reference(s): 3
IT Surfactants
(RNAi formulations containing; RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid)
IT 112-92-5, Stearyl alcohol 143-28-2, Oleyl alcohol 506-43-4, Linoleyl alcohol 816-94-4, DSPC 25322-68-3D, PEG, conjugates with lipids 36653-82-4, Palmityl alcohol 908860-82-2, CLinDMA 908860-83-3, PCLinDMA 908860-84-4, ECLinDMA 908860-85-5, DMOBA 908860-86-6, DMLBA 908860-87-7, DOBA 908860-89-9D, conjugates with PEG 942219-89-8D, conjugates with PEG
(RNAi formulations containing; RNA interference-mediated inhibition of hepatitis C virus gene expression using short interfering nucleic acid)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 5 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1163894 HCAPLUS Full-text
DOCUMENT NUMBER: 144:384616
TITLE: DMPC nanotubes: investigations of a new vesicle structure in dispersions from 1,2-dimyristoyl-sn-glycero-3-phosphatidylcholine
AUTHOR(S): Lauf, Ulrike
CORPORATE SOURCE: Germany
SOURCE: (2003) No pp. given Avail.: Metadata on Internet Documents, Order No. 17447 From: Metadata Internet Doc. [Ger. Diss.] 2003, (D1021-2), No pp. given URL: http://www.meind.de/search.py?recid=17447
DOCUMENT TYPE: Dissertation
LANGUAGE: German
AB Unavailable
IT 18194-24-6, 1,2-Dimyristoyl-sn-glycero-3-phosphatidylcholine
(investigations of a new vesicle structure in dispersions from 1,2-dimyristoyl-sn-glycero-3-phosphatidylcholine)
RN 18194-24-6 HCAPLUS
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 6-7 (General Biochemistry)
ST dimyristoyl glycero phosphatidylcholine DMPC nanotube vesicle
IT Nanotubes
(investigations of a new vesicle structure in dispersions from 1,2-dimyristoyl-sn-glycero-3-phosphatidylcholine)
IT Organelle
(vesicle; investigations of a new vesicle structure in dispersions from 1,2-dimyristoyl-sn-glycero-3-phosphatidylcholine)
IT 18194-24-6, 1,2-Dimyristoyl-sn-glycero-3-phosphatidylcholine
(investigations of a new vesicle structure in dispersions from 1,2-dimyristoyl-sn-glycero-3-phosphatidylcholine)

L27 ANSWER 6 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:612129 HCAPLUS Full-text
DOCUMENT NUMBER: 143:139166
TITLE: Assembly of gas-filled microvesicle with active component for contrast imaging
INVENTOR(S): Schneider, Michel; Bussat, Philippe; Yan, Feng; Senente, Anne
PATENT ASSIGNEE(S): Bracco Research S. A., Switz.
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063306	A1	20050714	WO 2004-IB4233 <--	20041221
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004308757	A1	20050714	AU 2004-308757 <--	20041221
CA 2545362	A1	20050714	CA 2004-2545362 <--	20041221

EP 1696965	A1	20060906	EP 2004-806412 <--	20041221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1897978	A	20070117	CN 2004-80038618 <--	20041221
JP 2007515471	T	20070614	JP 2006-546390 <--	20041221
IN 2006CN02240	A	20070608	IN 2006-CN2240 <--	20060621
NO 2006003420	A	20060922	NO 2006-3420 <--	20060724
US 20070081946	A1	20070412	US 2006-584382 <--	20060921
PRIORITY APPLN. INFO.:			EP 2003-79014 <--	A 20031222
			WO 2004-IB4233	W 20041221

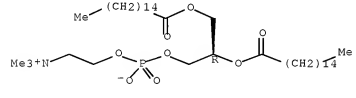
AB Assembly comprising a gas-filled microvesicle and a structural entity which is capable to associate through an electrostatic interaction to the outer surface of said microvesicle (microvesicle associated component - MAC), thereby modifying the physico-chemical properties thereof. Said MAC comprises a targeting ligand, a diagnostic agent or any combination thereof. Optionally a bioactive agent can further be associated to the MAC. The assembly of the invention can be formed from gas-filled microbubbles or microballoons and a MAC having preferably nanometric dimensions, e.g. a micelle, and is used as an active component in diagnostically and/or therapeutically active formulations, in particular for enhancing the imaging in the field of ultrasound contrast imaging, including targeted ultrasound imaging, ultrasound-mediated drug delivery and other imaging techniques such as mol. resonance imaging (MRI) or nuclear imaging.

IT 63-89-8, Dipalmitoylphosphatidylcholine 816-94-4, DSPC
(gas-filled microvesicle assembly for contrast imaging)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

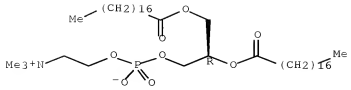
Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K0049-22
ICS A61K0051-12; A61K0047-48; A61K0041-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 8, 9
IT Drug delivery systems
(nanoparticles; gas-filled microvesicle assembly for contrast imaging)
IT Surfactants
(polymeric; gas-filled microvesicle assembly for contrast imaging)
IT 63-89-8, Dipalmitoylphosphatidylcholine 68-04-2, Sodium citrate 302-95-4, Sodium deoxycholate 555-44-2, Tripalmitin 816-94-4, DSPC 1309-38-2, Magnetite, biological studies 1397-89-3, Fungizone 7440-57-5, Gold, biological studies 14276-65-4, Gadolinium 153, biological studies 17688-29-8, Dapc 25322-68-3, Peg 28462-56-8 71065-87-7 80755-87-9 118301-40-9 170931-04-1, Dspe-peg 185463-23-4, Dppg 200880-42-8 216165-62-7 220609-41-6, DSTAP chloride 384835-54-5 419566-52-2 691397-13-4, Pluronic F68 858069-13-3, Ethyl SPC 3 858095-54-2, DSPE-PTE 020
(gas-filled microvesicle assembly for contrast imaging)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bristol-Myers Squibb Ph	2003			WO 03015831 A	HCAPLUS
Cohen	1996			US 5562099 A	HCAPLUS
Dugstad, H	2001			US 6221337 B1	HCAPLUS
Holmes, M	1995			WO 9523615 A	HCAPLUS
Jo, K	2001			US 6331289 B1	HCAPLUS
Schneider	1996			US 5531980 A	HCAPLUS

L27 ANSWER 7 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:612128 HCAPLUS Full-text
DOCUMENT NUMBER: 143:139165
TITLE: Gas-filled microvesicle assembly for contrast imaging
INVENTOR(S): Schneider, Michel; Bussat, Philippe; Yan, Feng; Senente, Anne
PATENT ASSIGNEE(S): Bracco Research S. A., Switz.
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063305	A1	20050714	WO 2004-IB4230	20041221

<--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2004308756	A1	20050714	AU 2004-308756 <--	20041221
CA	2547024	A1	20050714	CA 2004-2547024 <--	20041221
EP	1701745	A1	20060920	EP 2004-806409 <--	20041221

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

CN	1897979	A	20070117	CN 2004-80038619 <--	20041221
JP	2007515470	T	20070614	JP 2006-546389 <--	20041221
US	20070071685	A1	20070329	US 2006-584327 <--	20060621
IN	2006CN02233	A	20070608	IN 2006-CN2233 <--	20060621
NO	2006003419	A	20060921	NO 2006-3419 <--	20060724

PRIORITY APPLN. INFO.:	EP 2003-29534 <--	A	20031222
	WO 2004-IB4230	W	20041221

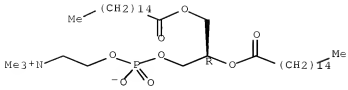
AB Assembly comprising a gas-filled microvesicle and a structural entity which is capable to associate through an electrostatic interaction to the outer surface of said microvesicle (microvesicle associated component - MAC), thereby modifying the physico-chemical properties thereof. Said MAC may optionally comprise a targeting ligand, a bioactive agent, a diagnostic agent or any combination thereof. The assembly of the invention can be formed from gas-filled microbubbles or microballoons and a MAC having a diameter of less than 100 pm, in particular a micelle and is used as an active component in diagnostically and/or therapeutically active formulations, in particular for enhancing the imaging in the field of ultrasound contrast imaging, including targeted ultrasound imaging, ultrasound-mediated drug delivery and other imaging techniques such as mol. resonance imaging (MRI) or nuclear imaging.

IT 63-89-8, Dipalmitoylphosphatidylcholine 816-94-4, DSPC
(gas-filled microvesicle assembly for contrast imaging)

RN 63-89-8 HCAPLUS

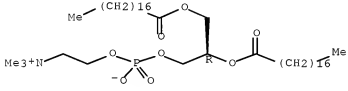
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium,
4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt,
4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K0049-22
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 8, 9
IT Drug delivery systems
(nanoparticles; gas-filled microvesicle assembly for contrast imaging)
IT Surfactants
(polymeric; gas-filled microvesicle assembly for contrast imaging)
IT 63-89-8, Dipalmitoylphosphatidylcholine 68-04-2, Sodium citrate 302-95-4, Sodium deoxycholate 555-44-2, Tripalmitin 816-94-4, DSPC 1309-38-2, Magnetite, biological studies 1397-89-3, Fungizone 7440-57-5, Gold, biological studies 14276-65-4, Gadolinium 153, biological studies 17688-29-8, DAPC 25322-68-3, Peg 28462-56-8 71065-87-7 80755-87-9 118301-40-9 170931-04-1, Dspe-peg 185463-23-4, Dppg 200880-42-8 216165-62-7 220609-41-6, DSTAP chloride 384835-54-5 419566-52-2 691397-13-4, Pluronic F68 858069-13-3, Ethyl SPC 3 858095-54-2, DSPE-PTE 020
(gas-filled microvesicle assembly for contrast imaging)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bristol-Myers Squibb Ph	2003			WO 03015831 A	HCAPLUS
Cohen	1996			US 5562099 A	HCAPLUS
Dugstad, H	2001			US 6221337 B1	HCAPLUS
Holmes, M	1995			WO 9523615 A	HCAPLUS
Jo, K	2001			US 6331289 B1	HCAPLUS
Schneider	1996			US 5531980 A	HCAPLUS

L27 ANSWER 8 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:158174 HCAPLUS Full-text
DOCUMENT NUMBER: 142:246151

TITLE: PEGylated lipid-containing microparticle preparations of camptothecins and manufacture of the preparations

INVENTOR(S): Sonobe, Hisao; Satsuka, Yasuyuki; Aiyama, Ritsuo
PATENT ASSIGNEE(S): Yakult Honsha Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005047815	A	20050224	JP 2003-203064 <--	20030729
PRIORITY APPLN. INFO.:			JP 2003-203064 <--	20030729

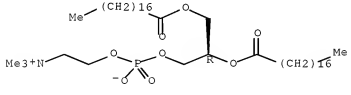
AB The prepns., which show good solubility and sustained-release property, are manufactured by (1) preparing dispersions of microparticles containing camptothecins and subjecting the dispersions to repeated freezing and thawing or by (2) adding drug-free microparticle compns. to camptothecins made into films to encapsulate the camptothecins in the microparticles. Thus, lipid film, prepared by dissolving Coatsome MC 8080 (L-α-Distearoylphosphatidylcholine), cholesterol, and Coatsome MGL 8080 (L-α-distearoylphosphatidyl-DL-glycerol) in CHCl3/MeOH and evaporation, was swollen with PBS buffer and dispersed upon ultrasonication. The liposome dispersion was extruded through a polycarbonate membrane filter and adjusted to pH 5.6 with HCl to form empty liposomes. The liposomes were added to a film of SN 38 (I; 7-ethyl-10-hydroxycamptothecin), prepared by dissolving I in CHCl3/MeOH and evaporation, incubated at 60° for 1 h, rinsed with sucrose-containing lactate buffer, and dialyzed against the same buffer to remove nonencapsulated I.

IT 816-94-4, L-α-Distearoylphosphatidylcholine
(Coatsome MC 8080; manufacture of microparticle prepns. such as liposomes of camptothecins by encapsulating with PEGylated lipids)

RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K0031-4745
ICS A61K0009-127; A61K0047-34; A61P0035-00

CC 63-6 (Pharmaceuticals)

IT Drug delivery systems
(nanospheres; manufacture of microparticle prepns. such as liposomes of camptothecins by encapsulating with PEGylated lipids)

IT 816-94-4, L-α-Distearoylphosphatidylcholine
(Coatsome MC 8080; manufacture of microparticle prepns. such as liposomes of camptothecins by encapsulating with PEGylated lipids)

L27 ANSWER 9 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:34972 HCAPLUS Full-text
DOCUMENT NUMBER: 142:110031
TITLE: Nanotube structures having a surfactant bilayer inner wall coating
INVENTOR(S): Smirnov, Alex I.
PATENT ASSIGNEE(S): North Carolina State University, USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005003722	A2	20050113	WO 2004-US18651 <--	20040610
WO 2005003722	A3	20050310		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20080318245	A1	20081225	US 2004-865318 <--	20040610
US 7521225	B2	20090421		
PRIORITY APPLN. INFO.:			US 2003-478200P <--	P 20030613

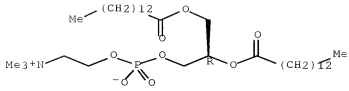
AB Nanotubes and nanotube array structures comprise (a) a nanotube having an inner wall portion; and (b) a bilayer coating formed on the inner wall portions, with the bilayer coating comprised of surfactants. A secondary compound such as a protein, peptide or nucleic acid may be associated with the bilayer coating. The structures are useful for, among other things, affinity purification, catalysis, and as biochips.

IT 18194-24-6, 1,2-Dimyristoylsn-glycero-3-phosphocholine
(nanotube structures having a surfactant bilayer inner wall coating)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G01N
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 3
ST nanotube structure surfactant bilayer inner wall coating
IT Coating materials
(Bilayer; nanotube structures having a surfactant bilayer inner wall coating)
IT Coating process
(Capillary; nanotube structures having a surfactant bilayer inner wall coating)
IT Purification
(affinity; nanotube structures having a surfactant bilayer inner wall coating)
IT Polymers, uses
(lift-off; nanotube structures having a surfactant bilayer inner wall coating)
IT Printing (impact)
(micro-; nanotube structures having a surfactant bilayer inner wall coating)
IT Bilayer membranes
Biochips
Buffers
Catalysis
Catalysts
Centrifugation
Coating materials
Coating process
Composition
Flow
Hydration, chemical
Molecular association
Nanotubes
Phase transition temperature
Solutes
Solutions
Surfactants
Temperature
Time
Vesicles (colloidal)
(nanotube structures having a surfactant bilayer inner wall coating)
IT Nucleic acids
Peptides, uses
Phospholipids, uses
Proteins
(nanotube structures having a surfactant bilayer inner wall coating)
IT Graphic arts

(writing, microcapillary; nanotube structures having a surfactant bilayer inner wall coating)
IT 1344-28-1, Aluminum oxide, uses
(nanotube structures having a surfactant bilayer inner wall coating)
IT 18194-24-6, 1,2-Dimyristoylsn-glycero-3-phosphocholine 63321-67-5, 16-PC 66642-40-8, 5PC
(nanotube structures having a surfactant bilayer inner wall coating)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 20040173506 A1	
Anon				US 6180114 B1	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 10 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:780492 HCAPLUS Full-text
DOCUMENT NUMBER: 141:282808
TITLE: Liposomal curcumin for treatment of cancer
INVENTOR(S): Kurzrock, Razelle; Li, Lan; Mehta, Kapil; Aggarwai, Bharat Bhushan
PATENT ASSIGNEE(S): The University of Texas MD Anderson Cancer Center, USA
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080396	A2	20040923	WO 2004-US6832 <--	20040305
WO 2004080396	A3	20041202		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20060067998	A1	20060330	US 2005-221179	20050907
US 20080103213	A1	20080501	US 2007-868251	20071005
US 20080138400	A1	20080612	US 2007-949027	20071201
PRIORITY APPLN. INFO.:			US 2003-452630P <--	P 20030307
			WO 2004-US6832	A 20040305
			US 2005-221179	A2 20050907
			US 2007-868251	A2 20071005

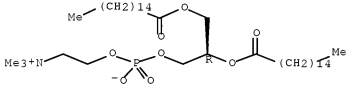
AB The present invention provides a compns. and methods for the treatment of cancer, including pancreatic cancer, breast cancer and melanoma, in a human patient. The methods and compns. of the present invention employ curcumin or a curcumin analog encapsulated in a colloidal drug delivery system, preferably a liposomal drug delivery system. Suitable colloidal drug delivery systems also include nanoparticles, nanocapsules, microparticles or block copolymer micelles. The colloidal drug delivery system encapsulating curcumin or a curcumin analog is administered parenterally in a pharmaceutically acceptable carrier. Thus, liposomes were prepared by using DMPC/DMPE-PEG-200 (95:5) and curcumin.

IT 63-89-8, DPPC 18194-24-6, DMPC
(liposomal curcumin for treatment of cancer)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

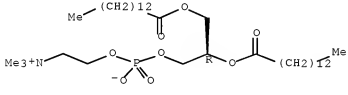
Absolute stereochemistry. Rotation (+).



RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

IT Drug delivery systems
(nanocapsules; liposomal curcumin for treatment of cancer)

IT Drug delivery systems
(nanoparticles; liposomal curcumin for treatment of cancer)

IT Drug delivery systems
(nanospheres; liposomal curcumin for treatment of cancer)

IT 57-88-5, Cholesterol, biological studies 63-89-8, DPPC

120-46-7, Dibenzoylmethane 458-37-7D, Curcumin, derivs. 532-65-0
1080-12-2, Feruloylmethane 4235-95-4, DOPC 18194-24-6,
DMPC 19697-86-0 22608-11-3, DemethoxyCurcumin 33171-05-0,
BisDemethoxyCurcumin 36062-04-1, Tetrahydrocurcumin 36557-16-1,
Sodium curcuminate 61361-72-6, Dimyristoylphosphatidylglycerol
95435-93-1 160096-59-3 170931-04-1, DSPE-PEG 211733-74-3
757235-80-6, PiperonylCurcumin
(liposomal curcumin for treatment of cancer)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				WO 0202582 A1	HCAPLUS
Anon				DE 10029770 A1	HCAPLUS
Anon				US 5916596 A	HCAPLUS
Anon				US 6306383 B1	HCAPLUS

L27 ANSWER 11 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:219946 HCAPLUS Full-text
DOCUMENT NUMBER: 140:249011
TITLE: Membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles
INVENTOR(S): Sligar, Stephen G.; Bayburt, Timothy H.; Schuler, Mary A.; Civjan, Natanya R.; Grinkova, Yelena V.; Denisov, Ilia G.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 70 pp., Cont.-in-part of U.S. Ser. No. 990,087.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040053384	A1	20040318	US 2003-465789 <--	20030618
US 7083958	B2	20060801		
US 20060057662	A1	20060316	US 2001-990087 <--	20011120
US 7048949	B2	20060523		
US 20050152984	A1	20050714	US 2004-979506 <--	20041102
US 20050182243	A1	20050818	US 2005-33489 <--	20050111
US 20060088524	A1	20060427	US 2005-259950 <--	20051027
US 20060211092	A1	20060921	US 2006-439458 <--	20060523
US 7575763	B2	20090818		
US 20060211093	A1	20060921	US 2006-439466 <--	20060523
JP 2008044958	A	20080228	JP 2007-244302 <--	20070920
US 20090047356	A1	20090219	US 2008-211514 <--	20080916
PRIORITY APPLN. INFO.:			US 2000-252233P <--	P 20001120

US 2001-990087		A2 20011120
	<--	
JP 2002-543509		A3 20011120
	<--	
US 2003-465789		A2 20030618
	<--	
US 2004-536281P		P 20040113
US 2004-622737P		P 20041027
US 2005-33489		A2 20050111
US 2005-259950		A3 20051027

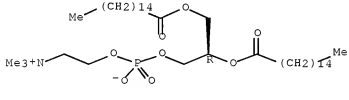
AB Membrane proteins are difficult to express in recombinant form, purify, and characterize, at least in part due to their hydrophobic or partially hydrophobic properties. The membrane scaffold proteins (MSP) of the present invention assemble with target membrane or other hydrophobic or partially hydrophobic proteins or membrane fragments to form soluble nanoscale particles (termed Nanodiscs) which preserve their native structure and function and are improved over liposomes and detergent micelles. In the presence of phospholipid, MSPs form nanoscopic phospholipid bilayer disks, with the MSP stabilizing the particle at the perimeter of the bilayer domain. The particle bilayer structure allows manipulation of incorporated proteins in solution or on solid supports, including for use with such surface-sensitive techniques as scanning probe microscopy or surface plasmon resonance. The nanoscale particles, which are robust in terms of integrity and maintenance of biol. activity of incorporated proteins, facilitate pharmaceutical and biol. research, structure/function correlation, structure determination, biosepn., and drug discovery.

IT 63-89-8, DPPC
(membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM C12N0009-02

INCL 435189000

CC 6-6 (General Biochemistry)
Section cross-reference(s): 9

ST membrane scaffold protein phospholipid nanoparticle assembly

IT Apolipoproteins
(A-I, membrane scaffold proteins constructed from; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)

IT DNA sequences
(for synthetic membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Membrane, biological
Nanoparticles
Solubilizers
(membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Bacteriorhodopsins
G protein-coupled receptors
Receptors
(membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Phospholipids, biological studies
(membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Proteins
(membrane; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Protein sequences
(of synthetic membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Proteins
(scaffolding; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT Detergents
(solubilizing agents; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 5-HT receptors
(type 5-HT1A; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 670337-90-3P 670337-92-5P, Scaffolding protein MSP1 (synthetic) 670337-94-7P, Scaffolding protein MSP2 (synthetic) 670337-96-9P 670337-98-1P, Scaffolding protein MSP1D5D6 (synthetic) 670338-00-8P, Scaffolding protein MSP1Db (synthetic) 670338-01-9P, Scaffolding protein MSP1D3 (synthetic) 670338-02-0P, Scaffolding protein MSP1D9 (synthetic) 670338-03-1P 670338-04-2P, Scaffolding protein MSP1E1 (synthetic) 670338-05-3P, Scaffolding protein MSP1E2 (synthetic) 670338-06-4P, Scaffolding protein MSP1E3 (synthetic) 670338-07-5P, Scaffolding protein MSP1TEV (synthetic) 670338-08-6P, Scaffolding protein MSP1NH (synthetic) 670338-09-7P, Scaffolding protein MSP1T2 (synthetic) 670338-10-0P, Scaffolding protein MSP1T2NH (synthetic) 670338-11-1P, Scaffolding protein MSP1T3 (synthetic) 670338-12-2P, Scaffolding protein MSP1D4D5 (synthetic) 670338-13-3P, Scaffolding protein MSP1D3D9 (synthetic) 670338-14-4P 670338-15-5P
(amino acid sequence; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 9035-51-2, Cytochrome P 450, biological studies 9035-58-9, Blood-coagulation factor III 9039-06-9, Cytochrome P 450 reductase 329736-03-0, Cytochrome P 450 3A4 329977-95-9, Cytochrome P 450 2B4 396732-04-0, Cytochrome P 450 6B1
(membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 63-89-8, DPPC
(membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 670337-89-0P 670337-91-4P 670337-93-6P 670337-95-8P 670337-97-0P 670337-99-2P
(nucleotide sequence; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)

IT 81-25-4
(solubilizing agents; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 670340-49-5 670340-51-9 670340-52-0 670340-53-1 670340-54-2
670340-55-3 670340-56-4 670340-57-5 670340-58-6 670340-59-7
670340-60-0 670340-61-1 670340-62-2 670340-63-3 670340-64-4
670340-65-5 670340-66-6 670340-67-7 670340-68-8 670340-69-9
670340-70-2 670340-71-3 670340-72-4 670340-74-6 670340-75-7
670340-76-8 670340-77-9 670340-78-0 670340-79-1 670340-80-4
670340-81-5 670340-82-6 670340-83-7 670340-84-8 670340-85-9
670340-86-0 670340-88-2
(unclaimed nucleotide sequence; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 670340-50-8 670340-73-5 670340-87-1 670340-89-3
(unclaimed protein sequence; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
IT 670225-83-9 670225-84-0 670225-85-1 670225-86-2 670225-87-3
670225-88-4 670225-89-5 670225-90-8 670225-91-9 670225-92-0
670225-93-1 670225-94-2 670225-95-3 670225-96-4 670225-97-5
(unclaimed sequence; membrane scaffold proteins for assembly of target membrane proteins into soluble nanoscale particles)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1993			WO 9317031	HCAPLUS
Anon	2000			WO 0075187	HCAPLUS
Anon	2001			WO 0102551 A2	HCAPLUS
Atkinson, D	1986	15	403	Ann. Rev. Biophys. C	HCAPLUS
Bakker, E	1982	88	26	Methods in Enzymol.	HCAPLUS
Barnes	1999	38	1083	A review of central	HCAPLUS
Bayburt, T	1998	123	37	J. Struct. Biol.	HCAPLUS
Bayburt, T		16	5993	Langmuir	HCAPLUS
Bayburt, T	2002	2	853	Nano Letters.	HCAPLUS
Bayburt, T	2002	99	6725	Proceedings of the N	HCAPLUS
Bayburt, T	2003	12	2476	Protein Science	HCAPLUS
Bayley, H	1982	88	74	Methods Enzymol.	HCAPLUS
Boguski, M	1986	27	1011	J. of Lipid Research	HCAPLUS
Borhani, D	1997	94	12291	Proc. Natl. Acad. Sc	HCAPLUS
Brouillette, C	1984	23	359	Biochemistry	HCAPLUS
Brouillette, C	2001	1531	4	Biochim. Biophys. Ac	HCAPLUS
Bruhn	1991	372	225	Biological Chemistry	HCAPLUS
Burgess	1999	38	14524	Biochem.	HCAPLUS
Carlson, J	1997	73	1184	Biophys. J.	HCAPLUS
Carlson, J	1997	73	1184	Biophysical J.	HCAPLUS
Carlson, J		16	3927	Langmuir	HCAPLUS
Carlson, J	2000	16	3927	Langmuir	HCAPLUS
Chen, J	2002	11	175	Insect Molecular Bio	HCAPLUS
Civjan, N	2003	35	556	BioTechniques	HCAPLUS
Dalton, M	1993	268	19274	J. Biol. Chem.	HCAPLUS
Dencher, N	1982	88	5	Methods Enzymol.	HCAPLUS
Denisov, I	2004			J. Am. Chem. Soc., I	
Duan	2004		450	Archives Biochemistr	HCAPLUS
Dubois	2001	411	672	Nature	HCAPLUS
Durbin, D	1999	40	2293	J. Lipid Research	HCAPLUS
Fidge, N	1999	40	187	J. Lipid Research	HCAPLUS
Fielding, P	1991	15	427	Biochemistry of Lipi	
Forte, T	1971	248	381	Biochim. Biophys. Ac	HCAPLUS

Frank	1998	37	13902	Biochem	HCAPLUS
Frank, P	1997	36	1798	Biochemistry	HCAPLUS
Friis, E	1999	96	1379	Proc. Natl. Acad. Sc	HCAPLUS
Gillotte	1996	271	23792	J. Biol. Chem	HCAPLUS
Gillotte	1999	274	2021	J. Biol. Chem.	HCAPLUS
Glomset, J	1968	9	155	J. Lipid Research	HCAPLUS
Heyn, M	1982	88	31	Methods Enzymol	HCAPLUS
Holvoet, P	1995	34	13334	Biochemistry	HCAPLUS
Imaoka, S	1992	31	6063	Biochemistry	HCAPLUS
Jin, L	1995	38	15659	Biochemistry	
Jonas, A	1991	1084	205	Biochim,. Biophys. A	HCAPLUS
Jonas, A	1989	264	4818	J. Biol. Chem	HCAPLUS
Jonas, A	1986	128	553	Methods Enzymol.	HCAPLUS
Koppaka, V	1999	274	14541	J. Biol. Chem.	HCAPLUS
Korenbrot, J		88	45	Methods Enzymol.	HCAPLUS
Laccotripe	1997	272	17511	J. Biol. Chem	HCAPLUS
Liadaki	2000	275	21262	J. Biol. Chem.	HCAPLUS
Marcel	1998		1149	International Congre	HCAPLUS
Marheineke, K	1998	441	49	FEBS Letters	HCAPLUS
McQuade	2001			US 6172262 B1	HCAPLUS
Mcgregor, C	2003	21	171	Nature Biotechnol	HCAPLUS
Mcmanus	2000	275	5043	J. Biol. Chem.	HCAPLUS
Miller, J	1996	35	1466	Biochemistry	HCAPLUS
Minnich	1992	267	16553	J. Biol. Chem	HCAPLUS
Mukhopadhyay, R	2000	78	251	J. Inorg. Biochem.	HCAPLUS
Phillips, J	1997	73	2337	Biophysics Journal	HCAPLUS
Reardon	2001	40	13670	Biochem.	HCAPLUS
Rezaie	1992	3	453	Protein Expression a	HCAPLUS
Robinson, C	1998	95	2186	Proc. Natl. Acad. Sc	HCAPLUS
Robinson, C	1998	95	5929	Proc. Natl. Acad. Sc	HCAPLUS
Rogers	1997	36	288	Biochem	HCAPLUS
Rogers, D	1998	37	11714	Biochemistry	HCAPLUS
Rogers, D	1998	37	945	Biochemistry	HCAPLUS
Rosseneu	1992		105	International Congre	HCAPLUS
Salamon, Z	1997	73	2791	Biophys. Journal	HCAPLUS
Savelli, G	2000	5	111	Curr. Opin. Colloid	HCAPLUS
Schafmeister, C	1993	262	734	Science	HCAPLUS
Scott	2001	276	48716	J. Biol. Chem.	HCAPLUS
Segrest, J	1999	274	31755	J. Biol. Chem.	HCAPLUS
Shaw, A	2004	556	260	FEBS Letters	HCAPLUS
Singh	2001			US 6248353 B1	HCAPLUS
Sklar, L	2000	28	976	BioTechniques	HCAPLUS
Skulachev, V	1982	88	35	Methods Enzymol	HCAPLUS
Sligar	2001			US 09990087	
Sligar, S	2003	312	115	Biochem. Biophys. Re	HCAPLUS
Sorci-Thomas	1997	272	7278	J. Biol. Chem	HCAPLUS
Sorci-Thomas	1998	273	11776	J. Biol. Chem	HCAPLUS
Sviridov	1996	271	33277	J. Biol. Chem	HCAPLUS
Sviridov	2000	275	19707	J. Biol. Chem.	HCAPLUS
Tocanne, J	1994	73	139	Chemistry and Physic	HCAPLUS
Wald, J	1990	265	20037	J. Biol. Chem	HCAPLUS
Wald, J	1990	265	20044	J. Biol. Chem	HCAPLUS
Wang, M	1997	94	8411	Proc. Natl. Acad. Sc	HCAPLUS
Wlodawer, A	1979	104	231	FEBS Let	HCAPLUS
Zuck, P	1999	96	11122	Proc. Natl. Acad. Sc	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L27 ANSWER 12 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:219937 HCAPLUS Full-text

DOCUMENT NUMBER: 140:249707
TITLE: Membrane-based assays using surface detector array devices suitable for use with a biosensor
INVENTOR(S): Yamazaki, Miki; Schafer, Robert J.; Ulman, Morrison; Groves, John T.
PATENT ASSIGNEE(S): Synamem Corporation, A California Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 26 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040053337	A1	20040318	US 2003-661790 <--	20030911
US 7407768	B2	20080805		
CA 2497139	A1	20040325	CA 2003-2497139 <--	20030911
WO 2004025262	A2	20040325	WO 2003-US28762 <--	20030911
WO 2004025262	A3	20040617		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003266155	A1	20040430	AU 2003-266155 <--	20030911
EP 1546696	A2	20050629	EP 2003-795701 <--	20030911
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005538377	T	20051215	JP 2004-536252 <--	20030911
US 20080176759	A1	20080724	US 2007-968078 <--	20071231
US 20080248492	A1	20081009	US 2007-968111 <--	20071231
PRIORITY APPLN. INFO.:			US 2002-410173P <--	P 20020911
			US 2003-661790 <--	A1 20030911
			WO 2003-US28762 <--	W 20030911

AB Membrane-based assays using surface detector array devices suitable for use with a biosensor are disclosed. The device is formed of a substrate having a surface defining a plurality of distinct bilayer-compatible surface regions separated by one or more bilayer barrier regions. The bilayer-compatible surface regions carry on them, separated by an aqueous film, supported fluid bilayers. The bilayers may contain selected receptors or biomols. A bulk aqueous phase covers the bilayers on the substrate surface. Arrays may be

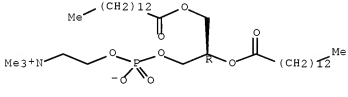
engineered to display natural membrane materials in a native fluid bilayer configuration, permitting high-throughput discovery of drugs that target and affect membrane components. The membrane-based assays detect binding events by monitoring binding-induced changes in one or more phys. properties of fluid bilayers. Vesicles with increasing concns. of ganglioside GM1 (0 %, 0.01 %, 0.05 %, 0.15 %, 0.25 %, 0.5 %, 1 %, 2 %) with 1 % NBD-PG in egg PC were robotically dispensed with Cartesian MicroSysTM Model 4100-2SQ. Direct dispensing methods were employed to deposit (10 nl) each of the 8 vesicle suspensions into pre-patterned 250+250 μm2 corrals in a row. Vesicle fusion occurs within seconds of deposition, forming fluid supported membranes that continuously fill each corral. Membrane fluidity was monitored by fluorescence recovery after photobleaching (FRAP) of the fluorescent probe lipid (NBD-PG). Eight identical chips were exposed to 8 increasing concns. of Cholera Toxin B (0 nM, 5 nM, 10 nM, 20 nM, 30 nM, 50 nM, 100 nM, 300 nM). Curve fitting to one site binding, Y=Bmax*X/(Kd+X), (Prism 3.0, GraphPad Software Inc., San Diego, Calif.) yielded an average binding constant of 13.2 nM at 0.25 % GM1 from 3 independently performed expts.

IT 18194-24-6D, DMPC, reaction with ganglioside GM1
(membrane-based assays using surface detector array devices suitable for biosensors)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM G01N0033-53

INCL 435007100

CC 9-1 (Biochemical Methods)
Section cross-reference(s): 1, 4

IT Liposomes
Vesicles (colloidal)
(as test agent; membrane-based assays using surface detector array devices suitable for biosensors)

IT Radioactive substances
Semiconductor nanostructures
(in bilayer membranes; membrane-based assays using surface detector array devices suitable for biosensors)

IT Metals, uses
(nanoparticles, in bilayer membranes; membrane-based assays using surface detector array devices suitable for biosensors)

IT Nanoparticles
(semiconductor or metal, in bilayer membranes; membrane-based assays using surface detector array devices suitable for biosensors)

IT 18194-24-6D, DMPC, reaction with ganglioside GM1
138026-71-8D, BODIPY, reaction with ganglioside GM1 217075-24-6D,

BODIPY FL C5, conjugates with ganglioside GM1
(membrane-based assays using surface detector array devices
suitable for biosensors)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abu-Salah	1991	42	1947	Biochemical Pharmaco	HCAPLUS
Aguedo	2003	80	211	International Journa	
Altstiel	1981	39	82	Journal of Virology	HCAPLUS
Anon	1998			WO 98/23948	HCAPLUS
Boxer	2001			US 6228326 B1	HCAPLUS
Boxer	2000	4	704	Curr. Opin. Chem. Bi	HCAPLUS
Carrier	1997	53	401	Biochemical Pharmaco	HCAPLUS
Grakoui	1999	285	221	Science	HCAPLUS
Groves	1997	275	651	Science	HCAPLUS
Gutsmann	2001	80	2935	Biophysical Journal	HCAPLUS
Hashimoto	2001	42	1160	Journal of Lipid Res	HCAPLUS
Hirn	1999	77	2066	Biophysical Journal	HCAPLUS
Keinanen	2001			US 6235535 B1	HCAPLUS
Kremer	2000	39	10309	Biochemistry	HCAPLUS
Lahiri	2005			US 6977155 B2	HCAPLUS
Moran	1987	45	769	Exp. Eye Res.	HCAPLUS
Ohyashiki	1992	111	419	J. Biochem.	HCAPLUS
Paul	1998			US 5770570 A	HCAPLUS
Pezeshk	1998	63	1863	Life Sciences	HCAPLUS
Rinia	2000	39	5852	Biochemistry	HCAPLUS
Rooney, M	1984	259	8281	J. Biol. Chem.	HCAPLUS
Salafsky	1996	35	14773	Biochemistry	HCAPLUS
Salafsky	1996	35	14773	Biochemistry	HCAPLUS
Song	2001			US 6297059 B1	HCAPLUS
Swamy	1997	36	7403	Biochemistry	HCAPLUS
Tsuchiya	2001	28	292	Clinical and Experim	HCAPLUS
Wagner	2000	79	1400	Biophysical Journal	HCAPLUS
Yamazaki	2004			US 6699719 B2	HCAPLUS
Yamazaki	2005	127	2826	J. Am. Chem. Soc.	HCAPLUS
Yang		229	286	Journal of Molecular	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 13 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:971576 HCAPLUS Full-text
DOCUMENT NUMBER: 140:31478
TITLE: Furtive lipidic nanocapsules, preparation process, and use as vector of active principle(s)
INVENTOR(S): Hoarau, Didier; Delmas, Pascal
PATENT ASSIGNEE(S): Ethypharm, Fr.
SOURCE: Fr. Demande, 70 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2840532	A1	20031212	FR 2002-7175 <--	20020611
FR 2840532	B1	20050506		

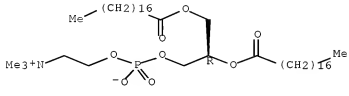
CA 2488385 A1 20031218 CA 2003-2488385 20030611
<--
WO 2003103822 A2 20031218 WO 2003-IB3213 20030611
<--
WO 2003103822 A3 20040325
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2003247061 A1 20031222 AU 2003-247061 20030611
<--
AU 2003247061 B2 20081009
US 20040076683 A1 20040422 US 2003-458324 20030611
<--
EP 1531800 A2 20050525 EP 2003-757174 20030611
<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
BR 2003014767 A 20050726 BR 2003-14767 20030611
<--
CN 1658845 A 20050824 CN 2003-813743 20030611
<--
JP 2005532355 T 20051027 JP 2004-510937 20030611
<--
NZ 537393 A 20070126 NZ 2003-537393 20030611
<--
IL 165603 A 20080807 IL 2003-165603 20030611
<--
US 20050214378 A1 20050929 US 2004-518173 20041210
<--
MX 2004012567 A 20050419 MX 2004-12567 20041213
<--
NO 2005000153 A 20050111 NO 2005-153 20050111
<--
ZA 2005000228 A 20050711 ZA 2005-228 20050111
<--
PRIORITY APPLN. INFO.: FR 2002-7175 A 20020611
<--
US 2002-421112P P 20020909
<--
WO 2003-IB3213 W 20030611
<--

AB Furtive lipidic nanocapsules made up of liquid or semi-fluid lipid cores at ambient temperature and of an external lipidic envelope comprising lipid hydrophilic surfactants, lipophilic surfactants, and an amphiphilic derivative of poly (ethylene glycol) with molar mass higher or equal to 1000 g/mol, preferably higher or equal to 2000 g/mol, their methods of preparation and their use as vector of active principle (s) are described. Liposomes comprising hydrogenated soya phosphatidylcholine 1.50, distearoylphosphatidylethanolamine-polyethylene glycol 0.92, Soluton HS15 8.90, Labrafac 10.08, sodium chloride 4.40, and water 74.20% were prepared

IT 816-94-4, Distearoylphosphatidylcholine
(furtive lipidic nanocapsules, preparation process, and use as

vector of active principle(s))
RN 816-94-4 HCAPLUS
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium,
4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt,
4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K0009-51
ICS A61P0035-00; A61P0029-00; A61P0031-00
CC 63-6 (Pharmaceuticals)
ST lipid nanocapsules phosphatidylcholine
distearoylphosphatidylethanolamine polyethylene glycol
IT Polyoxyalkylenes, biological studies
(amphiphilic derivs.; furtive lipidic nanocapsules,
preparation process, and use as vector of active principle(s))
IT Analgesics
Anti-inflammatory agents
Antibacterial agents
Antibiotics
Antitumor agents
Circulation
Neoplasm
Poisoning, biological
Surfactants
(furtive lipidic nanocapsules, preparation process, and use as
vector of active principle(s))
IT Carotenes, biological studies
Corticosteroids, biological studies
Glycerides, biological studies
Lecithins
Phosphatidylcholines, biological studies
Phospholipids, biological studies
Polyoxyalkylenes, biological studies
(furtive lipidic nanocapsules, preparation process, and use as
vector of active principle(s))
IT Drug delivery systems
(nanocapsules; furtive lipidic nanocapsules,
preparation process, and use as vector of active principle(s))
IT Phosphatidylcholines, biological studies
(soya, hydrogenated; furtive lipidic nanocapsules, preparation
process, and use as vector of active principle(s))
IT 50-02-2, Dexamethasone 50-18-0, Cyclophosphamide 51-21-8,
5-Fluorouracil 55-98-1, Busulfan 110-27-0, Isopropyl myristate
111-62-6, Ethyl oleate 124-06-1, Ethyl myristate 124-07-2D,
Caprylic acid, triglycerides 147-94-4, Cytarabin 305-03-3,
Chlorambucil 316-46-1, 5-Fluorouridine 334-48-5D, Capric acid,
triglycerides 574-93-6, Phthalocyanine 628-97-7, Ethyl palmitate
816-94-4, Distearoylphosphatidylcholine 1397-89-3,

Amphotericin b 4537-76-2, Distearoylphosphatidylethanolamine 7689-03-4, Camptothecin 20830-81-3, Daunomycin 23214-92-8, Doxorubicin 25322-68-3, Polyethylene glycol 25322-68-3D, Polyethylene glycol, amphiphilic derivs. 33069-62-4, Paclitaxel 61909-81-7, Polyethylene glycol 12-hydroxystearate 83826-43-1, Octyldodecyl myristate 91421-42-0, Rubitecan 97682-44-5, Irinotecan 114977-28-5, Docetaxel 123948-87-8, Topotecan 145035-95-6, DOPE-Peg 170127-34-1

(furtive lipidic nanocapsules, preparation process, and use as vector of active principle(s))

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Imarx Pharmaceutical	1998			WO 9851284 A	HCAPLUS
Imarx Pharmaceuticals	1999			WO 9930620 A	HCAPLUS
Mainelab	2001			WO 0164328 A	HCAPLUS

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L27 ANSWER 14 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:930719 HCAPLUS Full-text

DOCUMENT NUMBER: 139:399782

TITLE: Production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly

INVENTOR(S): Donath, Edwin; Sukhorukov, Gleb B.; Lerche, Karl-heinz; Voigt, Andreas; Baumler, Hans; Caruso, Frank; Mohwald, Helmuth

PATENT ASSIGNEE(S): Max-Planck-Gesellschaft Zur Forderung der Wissenschaften e.v., Germany

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 646,742, abandoned.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030219384	A1	20031127	US 2003-376386 <--	20030227
US 7101575	B2	20060905		
DE 19812083	A1	19990930	DE 1998-19812083 <--	19980319
EP 972563	A1	20000119	EP 1998-113181 <--	19980715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19907552	A1	20000831	DE 1999-19907552 <--	19990222
WO 9947252	A2	19990923	WO 1999-EP1855 <--	19990319
WO 9947252	A3	20000113		
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 29924358	U1	20030206	DE 1999-29924358 <--	19990319

EP 1647270	A2	20060419	EP 2005-27658 <--	19990319
EP 1647270	A3	20060920		
EP 1647270	B1	20090617		
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
EP 1647326	A2	20060419	EP 2005-27659 <--	19990319
EP 1647326	A3	20060920		
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
EP 1867325	A2	20071219	EP 2006-19183 <--	19990319
EP 1867325	A3	20090715		
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
US 20060275373	A1	20061207	US 2006-502180 <--	20060810
US 20060275374	A1	20061207	US 2006-502181 <--	20060810
US 20060275375	A1	20061207	US 2006-502182 <--	20060810
PRIORITY APPLN. INFO.:			DE 1998-19812083 <--	A 19980319
			EP 1998-113181 <--	A 19980715
			DE 1999-19907552 <--	A 19990222
			WO 1999-EP1855 <--	W 19990319
			US 2000-646742 <--	B2 20001106
			EP 1999-911804 <--	A 19990319
			EP 2005-27659 <--	A3 19990319
			US 2003-376386 <--	A1 20030227

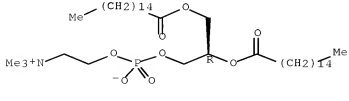
AB The invention relates to capsules coated with a polyelectrolyte shell and methods for the production thereof. Preparation of polystyrene latex particles alternately coated with poly(allylamine hydrochloride) and poly(sodium styrene sulfonate) is described.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K0049-00
ICS A61K0038-43; A61K0009-48; A01N0025-28
INCL 424009600; X42-445.2; X42-4 9.41; X50-435.9
CC 63-6 (Pharmaceuticals)
ST nanocapsules microcapsules layer wise polyelectrolyte assembly prodn
IT Polyelectrolytes
(anionic; production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)
IT Drug delivery systems
(microcapsules; production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)
IT Drug delivery systems
(nanocapsules; production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)
IT Catalysts
Crystals
Gas analysis
Polyelectrolytes
Surfactants
(production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)
IT Aminoplasts
Enzymes, biological studies
Lipids, biological studies
Polymers, biological studies
(production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)
IT 63-89-8, Dipalmitoylphosphatidylcholine 9003-08-1, Melamine-formaldehyde polymer 9003-53-6, Polystyrene 19698-29-4, Dipalmitoylphosphatidic acid 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26062-79-3, Polydiallyldimethylammonium chloride 26100-51-6, Polylactic acid 50851-57-5 62744-35-8, Poly(sodium styrenesulfonate) 71550-12-4, Poly(allylamine hydrochloride)
(production of nanocapsules and microcapsules by layer-wise polyelectrolyte self-assembly)
OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L27 ANSWER 15 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:796878 HCAPLUS Full-text
DOCUMENT NUMBER: 139:306530
TITLE: Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection
INVENTOR(S): Mckenna, Hilary J.; Liebowitz, David N.; Maliszewski, Charles R.
PATENT ASSIGNEE(S): Immunex Corporation, USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003083083	A2	20031009	WO 2003-US9773 <--	20030326
WO 2003083083	A3	20040624		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2480128	A1	20031009	CA 2003-2480128 <--	20030326
AU 2003224810	A1	20031013	AU 2003-224810 <--	20030326
AU 2003224810	B2	20060831		
US 20040022760	A1	20040205	US 2003-401364 <--	20030326
EP 1487477	A2	20041222	EP 2003-721501 <--	20030326

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 2005528373	T	20050922	JP 2003-580519 <--	20030326
MX 2004009394	A	20050125	MX 2004-9394 <--	20040924

PRIORITY APPLN. INFO.:	US 2002-368263P <--	P	20020326
	US 2002-427835P <--	P	20021119
	WO 2003-US9773 <--	W	20030326

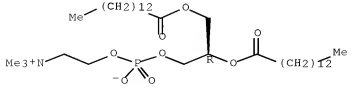
AB The present invention relates to methods of using Flt3-ligand (Flt3-L) in immunization protocols to enhance immune responses against vaccine antigens. Embodiments include administering Flt3-ligand prior to immunizing a subject with a vaccine, wherein the vaccine comprises at least one antigen formulated in one or more adjuvants. Methods of treating and preventing cancer, allergy and infection using Flt3-ligand immunization protocols are also provided. Methods of using Flt3-ligand immunization protocols for in vivo evaluation of antigens and adjuvants are also provided.

IT 18194-24-6, Dimyristoyl phosphatidylcholine
(Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C12N
CC 15-2 (Immunochemistry)
Section cross-reference(s): 63
IT AIDS (disease)
Actinomyces israelii
African swine fever virus
Allergy
Antitumor agents
Arenaviridae
Aspergillus fumigatus
Astrovirus
Bacteroides
Birnaviridae
Blastomyces dermatitidis
Borrelia burgdorferi
Bunyaviridae
Bunyavirus
CD4-positive T cell
CD8-positive T cell
Calicivirus
Candida albicans
Chlamydia trachomatis
Clostridium perfringens
Clostridium tetani
Coccidioides immitis
Coronaviridae
Coronavirus
Corynebacterium
Corynebacterium diphtheriae
Cryptococcus neoformans
Cytomegalovirus
Dengue virus
Ebola virus
Enterobacter aerogenes
Enterococcus faecalis
Enterovirus
Epitopes
Equine encephalosis virus
Erysipelothrix rhusiopathiae
Eubacteria
Filoviridae
Flaviviridae
Fusobacterium nucleatum
Granulicatella adiacens
Hantaan virus
Hantavirus
Helicobacter pylori
Hepadnaviridae
Hepatitis A virus
Hepatitis B virus
Herpesviridae
Histoplasma capsulatum
Human
Human adenovirus
Human coxsackievirus
Human echovirus
Human herpesvirus 1
Human herpesvirus 2
Human herpesvirus 3

Human immunodeficiency virus 3
Human parainfluenza virus
Human poliovirus
Immunization
Immunostimulants
Immunotherapy
Infection
Influenza virus
Iridoviridae
Klebsiella pneumoniae
Legionella pneumophila
Leishmania
Leptospira
Listeria monocytogenes
Measles virus
Melanoma
Microparticles
Microspheres
Mumps virus
Mus
Mycobacterium
Mycobacterium avium
Mycobacterium gordonae
Mycobacterium intracellulare
Mycobacterium kansasii
Mycobacterium tuberculosis
Mycosis
Nairovirus
Nanoparticles
Neisseria gonorrhoeae
Neisseria meningitidis
Norwalk virus
Orbivirus
Orthomyxoviridae
Papillomavirus
Papovaviridae
Paramyxoviridae
Parvoviridae
Parvovirus
Pasteurella multocida
Pathogen
Phlebovirus
Picornaviridae
Plasmodium falciparum
Plasmodium gonderi
Plasmodium malariae
Plasmodium vivax
Polyomavirus
Poxviridae
Protein sequences
Rabies virus
Reoviridae
Respiratory syncytial virus
Retroviridae
Rhabdoviridae
Rhinovirus
Rotavirus
Rubella virus
Sarcosporida
Schistosoma

Staphylococcus aureus
Streptobacillus moniliformis
Streptococcus agalactiae
Streptococcus anaerobius
Streptococcus bovis
Streptococcus group A
Streptococcus group B
Streptococcus pneumoniae
Streptococcus pyogenes
Taenia saginata
Taenia solium
Togaviridae
Treponema pallidum
Treponema pallidum pertenue
Trichinella
Trichomonas
Trypanosoma
Vaccines
Vaccinia virus
Variola virus
Vesicular stomatitis virus
Yellow fever virus
(Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection)

IT Nanostructures
Spheres
(nanospheres; Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection)

IT Surfactants
(nonionic; Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection)

IT 53-43-0, DHEA 111-01-3, Squalane 111-02-4, Squalene 147-85-3D, L-Proline, zinc salt and complexes 302-95-4, Deoxycholic acid sodium salt 3700-67-2, Dimethyldioctadecylammonium bromide 9001-67-6, Neuraminidase 9002-10-2, Tyrosinase 9005-65-6, Polysorbate 80 9011-14-7, Polymethylmethacrylate 9023-78-3, Triosephosphate isomerase 9028-79-9, Galactose oxidase 18194-24-6, Dimyristoyl phosphatidylcholine 18656-38-7, Dimyristoyl phosphatidylcholine 24936-38-7 26009-03-0, Polyglycolic acid 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Polylactic acid 26124-68-5, Polyglycolic acid 26266-58-0, Span 85 32222-06-3, CALCITRIOL 34346-01-5, Poly(lactic acid-glycolic acid) 35607-20-6, AVRIDINE 60355-78-4, MURAMETIDE 61361-72-6, Dimyristoyl phosphatidylglycerol 66112-59-2, Temurtide 66594-14-7, Quil-A 70280-03-4, GMDP 77229-76-6 83461-56-7, MTP-PE 83869-56-1, GM-CSF 99011-02-6, Imiquimod 106392-12-5, PLURONIC L121 121288-39-9, LOXORIBINE 131359-88-1, Algammulin 133863-30-6, Murapalmitine 143005-30-5, ImmTher 143011-72-7, G-CSF 144875-48-9, S 28463 147014-97-9, CDK-4 kinase 159940-37-1, Pleuran 160903-17-3, MONTANIDE ISA 720 179241-78-2, Caspase-8 190396-06-6, MONTANIDE ISA 51 252725-59-0, ISCOPREP 703 263746-33-4, ADJUMER 294664-93-0, BAY R1005 467423-50-3, Theramide 612058-80-7, PODDS
(Flt3-ligand for enhancing immune response of vaccine against cancer, allergy and infection)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 6291661 B1	HCAPLUS

L27 ANSWER 16 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:656227 HCAPLUS Full-text
DOCUMENT NUMBER: 139:185688
TITLE: Compositions and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents
INVENTOR(S): Hunter, William L.; Gravett, David M.; Liggins, Richard T.; Toleikis, Philip M.
PATENT ASSIGNEE(S): Angiotech Pharmaceuticals, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S. Ser. No. 137,736.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030157161	A1	20030821	US 2002-289150 <--	20021106
US 20020192280	A1	20021219	US 2002-137736 <--	20020501
US 20070213393	A1	20070913	US 2007-687528 <--	20070316
AU 2007203381	A1	20070809	AU 2007-203381 <--	20070719
JP 2009161543	A	20090723	JP 2009-29172 <--	20090210
PRIORITY APPLN. INFO.:			US 2001-288017P <--	P 20010501
			US 2002-137736 <--	A2 20020501
			AU 2002-302218 <--	A3 20020501
			JP 2002-584909 <--	A3 20020501
			US 2002-289150 <--	A1 20021106

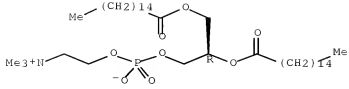
AB Disclosed herein are compns. and methods for treating a variety of inflammatory conditions (e.g., inflammatory arthritis, adhesions, tumor excision sites, and fibroproliferative diseases of the eye). For example, there is provided a composition comprising a protein or polysaccharide containing dispersed (e.g., in micelle or liposome form) anti-microtubule agent, which may be formulated for administration to a patient in need thereof. Nanoparticles of paclitaxel contained in a polysaccharide gels were prepared Biocompatibility of paclitaxel in the polysaccharide was tested in guinea pigs.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(compns. and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K0038-39
ICS A61K0031-728; A61K0031-721; A61K0031-722; A61K0009-127; A61K0009-14
INCL 424450000; 424489000; 514002000; 514054000; 514055000; 514057000; 514058000
CC 63-6 (Pharmaceuticals)
ST inflammatory condition protein polysaccharide microtubule paclitaxel nanoparticle
IT Adhesion, biological
Anti-inflammatory agents
Canidae
Equus caballus
Human
Inflammation
Mammalia
Micelles
Microemulsions
Surfactants
(compns. and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents)
IT Drug delivery systems
(nanocapsules; compns. and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents)
IT Drug delivery systems
(nanoparticles; compns. and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents)
IT Drug delivery systems
(nanospheres; compns. and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents)
IT 56-81-5, Glycerol, biological studies 57-88-5, Cholesterol, biological studies 60-01-5, Tributyrin 63-89-8, Dipalmitoylphosphatidylcholine 64-86-8, Colchicine 102-76-1, Triacetin 120-51-4, Benzyl benzoate 122-32-7, Triolein 7632-05-5D, Sodium phosphate, salt 7647-14-5, Sodium chloride, biological studies 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, derivs. 9004-54-0, Dextran, biological studies 9004-61-9, Hyaluronic acid 9004-61-9D, Hyaluronic acid, derivs. 9005-65-6, Polysorbate 80 9012-76-4, Chitosan 9012-76-4D, Chitosan, derivs. 12619-70-4, Cyclodextrin 26266-57-9, Sorbitan monopalmitate 106392-12-5, Ethylene oxide Propylene oxide Block copolymer 127943-53-7, Discodermolide
(compns. and methods for treating inflammatory conditions utilizing protein or polysaccharide containing anti-microtubule agents)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 17 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:616635 HCAPLUS Full-text
DOCUMENT NUMBER: 139:354761
TITLE: Atomic force microscopy studies of lateral phase separation in mixed monolayers of dipalmitoylphosphatidylcholine and dilauroylphosphatidylcholine
AUTHOR(S): Sanchez, Jacqueline; Badia, Antonella
CORPORATE SOURCE: Department of Chemistry, Universite de Montreal, Montreal, QC, 6128, Can.
SOURCE: Thin Solid Films (2003), 440(1,2), 223-239
CODEN: THSFAP; ISSN: 0040-6090
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

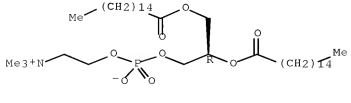
AB Atomic force microscopy imaging of dipalmitoylphosphatidylcholine (DPPC)/dilauroylphosphatidylcholine (DLPC) monolayers deposited onto alkanethiol modified-Au surfaces by the Langmuir-Schaefer technique was used to investigate domain formation in a binary system where phase separation arises from a difference in the alkyl chain lengths of the lipids. We have established how the condensed domain structure (shape and size) in DPPC/DLPC monolayers depends on the surface pressure and lipid composition The mixed monolayers exhibit a pos. deviation from an ideal mixing behavior at surface pressures of ≤32 mN/m. Lateral compression to pressures greater than the liquid-expanded-to-liquid-condensed (LE-to-LC) phase transition pressure of the mixed monolayer (.apprx.8-16 mN/m) induces extensive separation into condensed DPPC-rich domains and a fluid DLPC matrix. The condensed structures observed at a few milliNeutons per m above the LE-to-LC transition pressure resemble those reported for pure DPPC monolayers in the LE/LC co-existence region. At a bilayer equivalence pressure of 32 mN/m and 20°, condensed domains exist between xDPPC .apprx.0.25 and .apprx.0.80, analogous to aqueous DPPC/DLPC dispersions. Compression from 32-40 mN/m results in either a striking distortion of the DPPC domain shape or a break-up of the microscopic DPPC domains into a network of nanoscopic islands (at higher DPPC mol fractions), possibly reflecting a critical mixing behavior. The results of this study provide a fundamental framework for understanding and controlling the formation of lateral domain structures in mixed phospholipid monolayers.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(phase separation in mixed monolayers of dipalmitoylphosphatidylcholine and dilauroylphosphatidylcholine deposited onto alkanethiol modified-Au surfaces)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 66-1 (Surface Chemistry and Colloids)
IT 63-89-8, Dipalmitoylphosphatidylcholine 18194-25-7, Dilauroylphosphatidylcholine
(phase separation in mixed monolayers of dipalmitoylphosphatidylcholine and dilauroylphosphatidylcholine deposited onto alkanethiol modified-Au surfaces)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adamson, A	1997			Physical Chemistry o	
Babcock, K	1995			Beyond Topography	
Bagatolli, L	2000	78	290	Biophys J	HCAPLUS
Bagatolli, L	2000	79	434	Biophys J	HCAPLUS
Bain, C	1989	111	321	J Am Chem Soc	HCAPLUS
Biebuyck, H	1994	10	1825	Langmuir	HCAPLUS
Brown, D	1998	14	111	Annu Rev Cell Dev Bi	HCAPLUS
Brown, D	2000	275	17221	J Biol Chem	HCAPLUS
Colorado, R	1998	14	6337	Langmuir	HCAPLUS
Cornell, B	1997	387	580	Nature	HCAPLUS
Corvera, E	1992	1107	261	Biochim Biophys Acta	HCAPLUS
DeWolf, C	1999	97	129	Chem Phys Lipids	HCAPLUS
Deleu, M	2001	1513	55	Biochim Biophys Acta	HCAPLUS
Dietrich, C	2001	80	1417	Biophys J	HCAPLUS
Discher, B	1999	38	374	Biochemistry	HCAPLUS
Discher, B	1996	71	2583	Biophys J	HCAPLUS
Discher, B	1999	77	2051	Biophys J	HCAPLUS
Dufrene, Y	2000	1509	14	Biochim Biophys Acta	HCAPLUS
Dufrene, Y	1997	13	4779	Langmuir	HCAPLUS
Duschl, C	1994	67	1229	Biophys J	HCAPLUS
Ekelund, K	1999	15	6946	Langmuir	HCAPLUS
Feigenson, G	2001	80	2775	Biophys J	HCAPLUS
Flanders, B	2001	202	379	J Microsc	HCAPLUS
Florsheimer, M	1989	49	231	Chem Phys Lipids	MEDLINE
Gaines, G	1966			Insoluble Monolayers	
Gil, T	1998	1376	245	Biochim Biophys Acta	HCAPLUS
Girard-Egrot, A	1996	12	778	Langmuir	HCAPLUS
Hollars, C	1998	75	342	Biophys J	HCAPLUS
Honger, T	1996	35	9003	Biochemistry	HCAPLUS
Hwang, J	1995	270	610	Science	HCAPLUS
Jorgensen, K	1993	1152	135	Biochim Biophys Acta	HCAPLUS
Jorgensen, K	1995	95	942	Biophys J	
Jorgensen, K	2000	104	11763	J Phys Chem B	HCAPLUS
Kaganer, V	1999	71	779	Rev Mod Phys	HCAPLUS
Kalb, E	1992	1103	307	Biochim Biophys Acta	HCAPLUS
Kane, S	2000	16	8447	Langmuir	HCAPLUS
Kasselouri, A	1996	180	384	J Colloid Interf Sci	HCAPLUS
Keller, S	2000	79	2033	Biophys J	HCAPLUS
Keller, S	1998	81	5019	Phys Rev Lett	HCAPLUS
Knobler, C	1990	77	397	Adv Chem Phys	HCAPLUS
Knobler, C	1992	43	207	Annu Rev Phys Chem	HCAPLUS
Korlach, J	1999	96	8461	Proc Natl Acad Sci U	HCAPLUS
Koynova, R	2002	115	107	Chem Phys Lipids	HCAPLUS
Kuramori, M	2000	73	829	Bull Chem Soc Jpn	HCAPLUS
Lee, A	1977	472	285	Biochim Biophys Acta	HCAPLUS
Leporatti, S	2000	161	159	Colloids Surf A	HCAPLUS
Lide, D	2002			CRC Handbook of Chem	
Mabrey, S	1976	73	3862	Proc Natl Acad Sci U	HCAPLUS
Maget-Dana, R	1999	1462	109	Biochim Biophys Acta	HCAPLUS
Marsh, D	1996	1286	183	Biochim Biophys Acta	HCAPLUS

Marsh, D	1990			Handbook of Lipid Bi	
McConlogue, C	1997	13	7158	Langmuir	
McConnell, H	1991	42	171	Annu Rev Phys Chem	HCAPLUS
McConnell, H	1996	12	4897	Langmuir	HCAPLUS
McConnell, H	1984	81	3249	Proc Natl Acad Sci U	
Menke, M	2002	31	317	Eur Biophys J	HCAPLUS
Meuse, C	1998	74	1388	Biophys J	HCAPLUS
Milhiet, P	2001	81	547	Biophys J	HCAPLUS
Mingotaud, A	1993	1		Handbook of Monolaye	
Mohwald, H	1990	41	441	Annu Rev Phys Chem	MEDLINE
Mohwald, H	1995	12	29	Mol Membr Biol	MEDLINE
Mohwald, H	1995		161	Structure and Dynami	
Moraille, P	2002	41	4303	Angew Chem Int Ed	HCAPLUS
Mouritsen, O	1996			Biological Membranes	
Nag, K	1991	1068	157	Biochim Biophys Acta	HCAPLUS
Nag, K	1993	65	1019	Biophys J	HCAPLUS
Nag, K	1998	74	2983	Biophys J	HCAPLUS
Nag, K	2002	82	2041	Biophys J	HCAPLUS
Parasassi, T	1993	57	403	Photochem Photobiol	HCAPLUS
Petty, M	1996			Langmuir--Blodgett F	
Piknova, B	2001	81	2172	Biophys J	HCAPLUS
Plant, A	1999	15	5128	Langmuir	HCAPLUS
Radhakrishan, A	2000	97	12422	Proc Natl Acad Sci U	
Rice, P	1989	86	6445	Proc Natl Acad Sci U	HCAPLUS
Ross, M	2001	17	2437	Langmuir	HCAPLUS
Ruano, M	1998	74	1101	Biophys J	HCAPLUS
Sackmann, E	1994	346	3	FEBS Lett	HCAPLUS
Sackmann, E	1996	271	43	Science	HCAPLUS
Samsonov, A	2001	81	1486	Biophys J	HCAPLUS
Schief, W	2000	62	6831	Phys Rev E	HCAPLUS
Schneider, J	2000	79	1107	Biophys J	HCAPLUS
Shiku, H	1999	194	461	J Microsc	HCAPLUS
Silvius, J	1996	35	15198	Biochemistry	HCAPLUS
Simons, K	1997	387	569	Nature	HCAPLUS
Sivasankar, S	1999	96	11820	Proc Natl Acad Sci U	HCAPLUS
Solletti, J	1996	14	1492	J Vac Sci Technol B	HCAPLUS
Sparr, E	1999	15	6950	Langmuir	HCAPLUS
Subramaniam, S	1987	91	1715	J Phys Chem	HCAPLUS
Takamoto, D	2001	81	153	Biophys J	HCAPLUS
Tamm, L	1985	47	105	Biophys J	HCAPLUS
ten Grotenhuis, E	1996	71	1389	Biophys J	HCAPLUS
van Dijck, P	1977	470	58	Biochim Biophys Acta	HCAPLUS
Van Mau, N	1999	167	241	J Membr Biol	HCAPLUS
Vie, V	1998	14	4574	Langmuir	HCAPLUS
Vollhardt, D	1996	64	143	Adv Colloid Interfac	HCAPLUS
Weidemann, G	1995	100	187	Colloids Surf A	HCAPLUS
Weis, R	1991	57	227	Chem Phys Lipids	HCAPLUS
Weis, R	1985	89	4453	J Phys Chem	HCAPLUS
Williams, A	1995	102	231	Colloids Surf A	HCAPLUS
Yang, X	1994	59	139	Appl Phys A	
Yu, Z	1998	37	1540	Biochemistry	HCAPLUS
Yuan, C	2000	79	2768	Biophys J	HCAPLUS
Yuan, C	2001	81	1059	Biophys J	HCAPLUS
Yuan, C	2002	82	2526	Biophys J	HCAPLUS

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L27 ANSWER 18 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:615635 HCAPLUS Full-text
DOCUMENT NUMBER: 140:276721

TITLE: Mesostructured silica films with crystalline domains and structural features on multiple length scales

AUTHOR(S): Lee, Yoon-Seob; Archer, Jared R.; Rathman, James F.

CORPORATE SOURCE: Chemical Engineering Department, The Ohio State University, Columbus, OH, 43210-1180, USA

SOURCE: Studies in Surface Science and Catalysis (2003), 146(Nanotechnology in Mesostructured Materials), 29-32
CODEN: SSCTDM; ISSN: 0167-2991

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

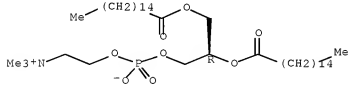
AB The cooperative self-organization of surfactant mols. with reactive silicate species is a key factor in the synthesis of mesoporous materials. Mesostructured films can be produced by exploiting similar self-assembly phenomena at the surface of a solid substrate in contact with a liquid solution; however, in this approach, the properties of the resulting film are strongly influenced by chemical and phys. properties of the solid. Alternately, films can be synthesized at vapor/liquid or liquid/liquid interfaces and then transferred to solid substrates. Confinement of the reaction environment to a fluid/fluid interface provides an addnl. level of control over the structural evolution that occurs during the reaction, while avoiding undesired influences from a solid phase. This paper presents 2 examples of mesostructured SiO2 films synthesized at fluid/liquid interfaces: (1) ultrathin films, produced at a gas/liquid interface, having highly regular stripes on 2 discrete length scales; (2) relatively thick mesoporous SiO2/collagen composite films, synthesized at a liquid/liquid interface, that are partially crystalline

IT 63-89-8, Dppc
(template; mesostructured ultrathin silica films having regular stripes on two discrete length scales produced at gas/liquid interface)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 66-6 (Surface Chemistry and Colloids)

IT Nanostructures
(films; mesostructured silica films with crystalline domains and structural features on multiple length scales)

IT Nanocomposites
(partially crystalline mesoporous SiO2/collagen composite films synthesized at liquid/liquid interface)

IT 63-89-8, Dppc

(template; mesostructured ultrathin silica films having regular stripes on two discrete length scales produced at gas/liquid interface)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Ignes-Mullol, J	2001	410	348	Nature	HCAPLUS
Lee, Y	2001	100	779	Reactions and Synthe	HCAPLUS
Lehn, J	2000		300	The New Chemistry	HCAPLUS
Takamoto, D	2001	293	1292	Science	HCAPLUS
Viswanathan, R	1995	269	51	Science	HCAPLUS

L27 ANSWER 19 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:606747 HCAPLUS Full-text
DOCUMENT NUMBER: 139:226760
TITLE: Nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique
AUTHOR(S): Moraille, Patricia; Badia, Antonella
CORPORATE SOURCE: Department of Chemistry, Universite de Montreal, Montreal, QC, H3C 3J7, Can.
SOURCE: Langmuir (2003), 19(19), 8041-8049
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

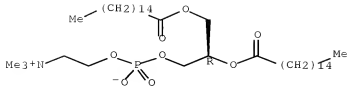
AB A new methodol. has been developed to create an extensive pattern of parallel stripes, .apprx.150-250 nm wide, in phospholipid bilayers supported on mica. These striped bilayers are prepared by the Langmuir-Blodgett (LB) film technique. A striped monolayer consisting of two phospholipids in different states (condensed and liquid-expanded) is used to direct the deposition of the solid- and liquid like phases of a second mixed monolayer during LB transfer. The authors also demonstrate that bilayer stripes can be generated by the condensation of phospholipids over the solid like stripe domains of the underlying monolayer for a one-component film deposited just below the liquid-expanded-to-liquid-condensed phase transition pressure. Nonionic detergent extraction of the liquid like phase from these LB films resulted in bilayer-thick phospholipid stripes separated by a mica surface. A periodic array of grooves was produced by the selective adsorption of protein onto the mica regions of the detergent -treated bilayer. The LB film deposition of binary mixts. of solid-phase- and fluid-phase-forming phospholipids constitutes a novel strategy to create linear surface patterns that can be used to direct the deposition of mols.

IT 63-89-8, L-α-DPPC
(nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 9-16 (Biochemical Methods)
Section cross-reference(s): 6
ST nanoscale stripe pattern phospholipid bilayer Langmuir Blodgett technique
IT Mixtures
(binary; nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique)
IT Atomic force microscopy
Bilayer membranes
Langmuir-Blodgett films
Monolayers
Phase transition
(nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique)
IT Phospholipids, analysis
(nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique)
IT Detergents
(nonionic; nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique)
IT 63-89-8, L-α-DPPC 18194-25-7, L-α-Dilauroylphosphatidylcholine
(nanoscale stripe patterns in phospholipid bilayers formed by the Langmuir-Blodgett technique)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Ahrens, H	2000	2	101	ChemPhysChem	
Bar, G	1998	14	1219	Langmuir	HCAPLUS
Bassereau, P	1997	13	7003	Langmuir	HCAPLUS
Berger, C	1995	11	4188	Langmuir	HCAPLUS
Blodgett, K	1934	56	495	J Am Chem Soc	HCAPLUS
Blodgett, K	1935	57	1007	J Am Chem Soc	HCAPLUS
Boxer, S	2000	4	704	Curr Opin Chem Biol	HCAPLUS
Brown, D	1998	164	103	J Membr Biol	HCAPLUS
Chen, C	1997	276	1425	Science	HCAPLUS
Czajkowsky, D	1995	34	12501	Biochemistry	HCAPLUS
Decher, G	1997	277	1232	Science	HCAPLUS
Demers, L	2001	40	3069	Angew Chem, Int Ed	HCAPLUS
Duschl, C	1994	33	1274	Angew Chem, Int Ed E	
Duschl, C	1994	67	1229	Biophys J	HCAPLUS
Fang, J	1996	12	1368	Langmuir	HCAPLUS
Fang, Y	1997	101	441	J Phys Chem B	HCAPLUS
Gleiche, M	2001	3	187	ChemPhysChem	
Gleiche, M	2000	403	173	Nature	HCAPLUS
Goren, M	2001	1	735	Nano Lett	HCAPLUS
Graf, K	1998	131	215	Colloids Surf, A	HCAPLUS
Grandbois, M	1998	74	2398	Biophys J	HCAPLUS

Hollars, C	1998	75	342	Biophys J	HCAPLUS
Hwang, J	1995	270	610	Science	HCAPLUS
Koenig, B	1996	12	1343	Langmuir	HCAPLUS
Kumar, S	2000	16	9936	Langmuir	HCAPLUS
Lee, K	2002	295	1702	Science	HCAPLUS
Leidy, C	2002	83	2625	Biophys J	HCAPLUS
Lewis, A	2000	18	261	Colloids Surf, B	HCAPLUS
Lu, N	2002	14	1812	Adv Mater	HCAPLUS
Macdonald, R	1999	77	2612	Biophys J	HCAPLUS
Magonov, S	1997	375	L385	Surf Sci	HCAPLUS
Mahnke, J	1999	15	8220	Langmuir	HCAPLUS
Mansky, P	1998	31	4399	Macromolecules	HCAPLUS
Marsh, D	1990			Handbook of Lipid Bi	
Meli, M	2002	2	131	Nano Lett	HCAPLUS
Moraille, P	2002	41	4303	Angew Chem, Int Ed	HCAPLUS
Moraille, P	2002	18	4414	Langmuir	HCAPLUS
Motschmann, H	2001		629	Handbook of Applied	
Nishimura, S	1993	159	198	J Colloid Interface	HCAPLUS
Riegler, H	1992	210/2	9	Thin Solid Films	
Rinia, H	1999	77	1683	Biophys J	HCAPLUS
Rinia, H	2001	501	92	FEBS Lett	HCAPLUS
Sanchez, J	2003	440	223	Thin Solid Films	HCAPLUS
Schaumann-Clausen, H	1999	15	8246	Langmuir	
Seul, M	1993	70	1658	Phys Rev Lett	HCAPLUS
Silverton, E	1977	74	5140	Proc Natl Acad Sci U	HCAPLUS
Solletti, J	1996	12	5379	Langmuir	HCAPLUS
Spratte, K	1994	25	211	Europhys Lett	HCAPLUS
Spratte, K	1994	10	3161	Langmuir	HCAPLUS
Tamm, L	1985	47	105	Biophys J	HCAPLUS

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L27 ANSWER 20 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:442987 HCAPLUS Full-text

DOCUMENT NUMBER: 140:266975

TITLE: Atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation

AUTHOR(S): Tokumasu, Fuyuki; Jin, Albert J.; Feigenson, Gerald W.; Dvorak, James A.

CORPORATE SOURCE: Laboratory of Malaria and Vector Research, Biochemical and Biophysical Parasitology Section, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, 20892, USA

SOURCE: Ultramicroscopy (2003), 97(1-4), 217-227
CODEN: ULTRD6; ISSN: 0304-3991

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Scanning probe microscopy studies of membrane fusion and nanoscopic structures were performed using hydrated single lipids and lipid mixts. Extruded vesicles of DMPC and mixts. at various concns. of DLPC, DPPC and cholesterol were deposited on freshly cleaved mica and studied in a fluid environment by AFM. The nanostructures formed by these extruded liposomes ranged from isolated unilamellar vesicles to flat sheet membranes and were marked influenced by thermodn. phase behavior. For DMPC membrane, intact bilayers exhibited a phase transition process in agreement with large bilayer patches. In the DLPC, DPPC and cholesterol mixts., nanoscopic domain diams. ranged from .apprx.25 to 48 nm with height differences of .apprx.1.4 nm; all values were

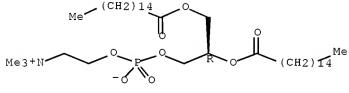
lipid composition-dependent. Our data support and extend previous studies of microscopic domains and phase boundaries of the same mixts. in giant unilamellar vesicles determined by confocal light microscopy. Our approach for preparing and utilizing supported membrane structures is potentially relevant to studies of native cell membranes.

IT 63-89-8, DPPC 18194-24-6, DMPC
(atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

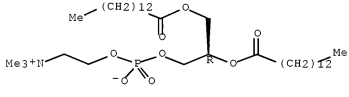
Absolute stereochemistry. Rotation (+).



RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 9-4 (Biochemical Methods)

ST atomic force microscopy nanometric liposome adsorption nanoscopic membrane formation

IT Microscopy
(Confocal; atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)

IT Vesicles (colloidal)
(Giant unilamellar; atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)

IT Bilayer membranes
(Large; atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)

IT Vesicles (colloidal)
(Unilamellar; atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)

IT Adsorption

Atomic force microscopy
Bilayer membranes
Cell membrane
Composition
Concentration (condition)
Environment
Fluids
Fusion, biological
Interface
Liposomes
Membranes, nonbiological
Microscopy
Mixtures
Nanostructures
Phase transition
Scanning probe microscopy
Thermodynamics
Vesicles (colloidal)
(atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)
IT Lipids, biological studies
(atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)
IT Mica-group minerals, uses
(atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)
IT Phase
(behavior; atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)
IT 57-88-5, Cholesterol, biological studies 63-89-8, DPPC 18194-24-6, DMPC 18194-25-7, DLPC
(atomic force microscopy of nanometric liposome adsorption and nanoscopic membrane domain formation)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anderson, R	2002	296	1821	Science	HCAPLUS
Bedzyk, M	1988	241	1788	Science	HCAPLUS
Buboltz, J	1999	1417	232	Biochim Biophys Acta	HCAPLUS
Caffrey, M	1992	61	1	Chem Phys Lipids	HCAPLUS
Clerc, S	1994	67	475	Biophys J	HCAPLUS
Dammann, B	1996		85	Handbook of Nonmedic	HCAPLUS
Dvorak, J	1975	187	748	Science	MEDLINE
Edidin, M	1997	7	528	Curr Opin Struct Bio	HCAPLUS
Edidin, M	2001	11	492	Trends Cell Biol	HCAPLUS
Egawa, H	1999	15	1660	Langmuir	HCAPLUS
Feigenson, G	2001	80	2775	Biophys J	HCAPLUS
Hata, T	2000	87	25	Biophys Chem	HCAPLUS
Hunter, D	1998	74	2996	Biophys J	HCAPLUS
Hwang, J	1995	270	610	Science	HCAPLUS
Jin, A	1999	38	13275	Biochemistry	HCAPLUS
Jin, A	2000	78	1183	Biophys J	HCAPLUS
Jin, A	1999	28	187	Eur Biophys J	HCAPLUS
Koenig, B	1996	12	1343	Langmuir	HCAPLUS
Korlach, J	1999		8461	Proceedings of the N	HCAPLUS
Lasch, P	1998	75	840	Biophys J	HCAPLUS
Lasic, D	1996			Handbook of Nonmedic	
Magonov, S	1997	375	L385	Sur Sci Lett	HCAPLUS
Mason, J	1998	295	468	Methods Enzymol	HCAPLUS

Mou, J	1994	33	9981	Biochemistry	HCAPLUS
Mui, B	1993	64	443	Biophys J	HCAPLUS
Muresan, A	2001	105	852	J Phys Chem B	HCAPLUS
Nielsen, L	2000	404	352	Nature	HCAPLUS
Pencer, J	2001	81	2716	Biophys J	HCAPLUS
Saxton, M	2001	81	2226	Biophys J	HCAPLUS
Seifert, U	1997	46	13	Adv Phys	HCAPLUS
Shao, Z	1995	11	241	Annu Rev Cell Dev Bi	HCAPLUS
Singer, S	1972	175	720	Science	HCAPLUS
Strey, H	1995	69	478	Biophys J	HCAPLUS
Tokumasu, F	2002	51	1	J Electron Microsc (	HCAPLUS
Woodle, M	1998			Long Circulating Lip	

OS.CITING REF COUNT: 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS RECORD (36 CITINGS)

L27 ANSWER 21 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:417587 HCAPLUS Full-text
DOCUMENT NUMBER: 138:406949
TITLE: Compositions for sustained action product delivery
INVENTOR(S): Edwards, David A.; Batycky, Richard P.; Schmitke, Jennifer L.; Tsapis, Nicholas Y. K.; Weitz, David A.; Hrkach, Jeffrey S.
PATENT ASSIGNEE(S): Advanced Inhalation Research, Inc., USA; President and Fellows of Harvard College
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003043586	A2	20030530	WO 2002-US37334 <--	20021120
WO 2003043586	A3	20030814		
WO 2003043586	A9	20040226		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2465779	A1	20030530	CA 2002-2465779 <--	20021120
AU 2002364701	A1	20030610	AU 2002-364701 <--	20021120
AU 2002364701	B2	20051013		
US 20030166509	A1	20030904	US 2002-300070 <--	20021120
EP 1458361	A2	20040922	EP 2002-803701 <--	20021120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005511629	T	20050428	JP 2003-545267 <--	20021120

PRIORITY APPLN. INFO.:

US 2001-331707P	P	20011120
<--		
US 2002-365660P	P	20020318
<--		
WO 2002-US37334	W	20021120
<--		

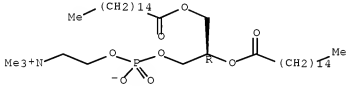
AB The present invention features pharmaceutical compns. comprising nanoparticles containing a sustained release bioactive agent. Examples were given for solns. containing DPPC, dimyristoylphosphatidylethanolamine and lactose for spray drying, bovine serum albumin or insulin solns., and preparation of polystyrene beads.

IT 63-89-8, Dppc
(compns. for sustained action product delivery)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K

CC 63-6 (Pharmaceuticals)

ST sustained release nanoparticle spray dried

IT Particle size
Surfactants
(compns. for sustained action product delivery)

IT Drug delivery systems
(nanoparticles, controlled-release; compns. for sustained action product delivery)

IT 50-28-2, Estradiol, biological studies 57-88-5, Cholesterol, biological studies 63-89-8, Dppc 74-55-5, Ethambutol 98-96-4, Pyrazinamide 998-07-2, 1,2-Dimyristoyl-sn-glycero-3-phosphoethanolamine 9003-53-6, Polystyrene 9004-10-8, Insulin, biological studies 13292-46-1, Rifampin 18559-94-9, Albuterol
(compns. for sustained action product delivery)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				US 5855913 A	HCAPLUS
Anon				US 6143211 A	HCAPLUS

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L27 ANSWER 22 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:355598 HCAPLUS Full-text

DOCUMENT NUMBER: 138:358470

TITLE: Blood clot-targeted nanoparticles

INVENTOR(S): Lanza, Gregory; Wickline, Samuel A.
PATENT ASSIGNEE(S): Barnes-Jewish Hospital, USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. 6,548,046.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030086867	A1	20030508	US 2002-225024 <--	20020820
US 7220401	B2	20070522		
CA 2373993	A1	20001130	CA 1999-2373993 <--	19990525
CA 2373993	C	20081118		
AU 9940975	A	20001212	AU 1999-40975 <--	19990525
AU 771565	B2	20040325		
EP 1251877	A1	20021030	EP 1999-924489 <--	19990525
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003521475	T	20030715	JP 2000-619473 <--	19990525
US 6548046	B1	20030415	US 1999-404963 <--	19990924
CA 2491758	A1	20040304	CA 2003-2491758 <--	20030820
WO 2004017907	A2	20040304	WO 2003-US26265 <--	20030820
WO 2004017907	A3	20040617		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003258325	A1	20040311	AU 2003-258325 <--	20030820
AU 2003258325	B2	20090611		
EP 1539252	A2	20050615	EP 2003-793255 <--	20030820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005536537	T	20051202	JP 2004-529815 <--	20030820
AU 2004202725	A1	20040715	AU 2004-202725 <--	20040622
AU 2004202725	B2	20061221		
US 20070202040	A1	20070830	US 2007-796064 <--	20070425

US 20080247943	A1	20081009	US 2007-544857		20070925
			<--		
PRIORITY APPLN. INFO.:			US 1999-404963	A2	19990924
			<--		
			US 1995-488743	A3	19950608
			<--		
			US 1997-854308	B1	19970512
			<--		
			US 1998-189118	B2	19981109
			<--		
			AU 1999-40975	A3	19990525
			<--		
			WO 1999-US11491	W	19990525
			<--		
			US 2002-225024	A	20020820
			<--		
			WO 2003-US26265	W	20030820
			<--		

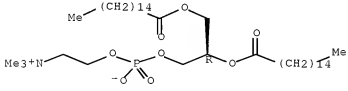
AB Emulsions comprise nanoparticles formed from high boiling perfluorochem. substances, the particles coated with a lipid/ surfactant coating are made target-specific by directly coupling said nanoparticles to a targeting ligand. The nanoparticles may further include biol. active agents, radionuclides, and/or other imaging agents. The perfluorocarbon nanoparticle contrast agent used in vivo (circulating) was produced by incorporating 1,2-dipalmitoyl-sn-glycero-3- phosphoethanolamine-N-4-(p-maleimidophenyl)butyramide (MPB-PE) into the outer lipid monolayer of the emulsion to accommodate subsequent ligand conjugation. Gd-DTPA-phosphatidylethanolamine (Gd-DTPA-PE) was added to the surfactant mixture at 20 mol%. Anti-fibrin monoclonal antibody was purified and a fibrin-targeted nanoparticle contrast agent was created by the covalent bonding of anti-fibrin F(ab)' fragments to the outer lipid membrane surface. Anti-fibrin F(ab)' fragments were generated and combined with the MPB-PEG-PE derivatized emulsion at pH 6.7 under nitrogen overnight. The conjugated nanoparticles were dialyzed, vialed and stored at 4°.

IT 63-89-8, DPPC
(blood clot-targeted nanoparticles)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K0051-00
ICS A61K0049-00

INCL 424001110; X42-4 .9321; X42-4 .936; X42-4 .9364

CC 63-6 (Pharmaceuticals)

ST blood clot targeting nanoparticle

IT Imaging agents
(NMR contrast; blood clot-targeted nanoparticles)

IT Imaging
(acoustic; blood clot-targeted nanoparticles)
IT Fibrins
(antibodies to; blood clot-targeted nanoparticles)
IT Chelating agents
Coating materials
Peptidomimetics
Thrombus
(blood clot-targeted nanoparticles)
IT Antibodies and Immunoglobulins
Hormones, animal, biological studies
Ligands
Lipids, biological studies
Perfluorocarbons
Radionuclides, biological studies
(blood clot-targeted nanoparticles)
IT Phosphatidylethanolamines, biological studies
(conjugates with gadolinium and DTPA; blood clot-targeted nanoparticles)
IT Drug delivery systems
(nanoparticles; blood clot-targeted nanoparticles)
IT 63-89-8, DPPC 67-43-6, Diethylenetriaminepentaacetic acid 67-43-6D, DTPA, conjugates with gadolinium, oleate and phosphatidylethanolamines 112-80-1D, Oleic acid, conjugate with gadolinium and DTPA 1197-18-8, Tranexamic acid 7440-54-2, Gadolinium, biological studies 7440-54-2D, Gadolinium, conjugates with DTPA, oleate and phosphatidylethanolamines 14133-76-7, Technetium-99, biological studies 140668-79-7 521093-83-4
(blood clot-targeted nanoparticles)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1988			EP 0251494	HCAPLUS
Anon	1994			DE 4232755	HCAPLUS
Anon	1995			WO 9503829	HCAPLUS
Anon	1996			EP 0727225	HCAPLUS
Anon	1996			WO 9640285	HCAPLUS
Anon	1998			EP 0274431	HCAPLUS
Flacke	2001	104	1280	Circulation	HCAPLUS
Hnatowich	1987	28	1294	Journal of Nuclear M	HCAPLUS
Hudson	1990	65	672	Archives of Disease	
Lanza	1997			US 5690907 A	HCAPLUS
Lanza	1998			US 5780010 A	
Lanza	1999			US 5958371 A	HCAPLUS
Lanza	2004			US 6821506 B2	HCAPLUS
Lanza	1996	94	3334	Circulation	HCAPLUS
Lanza	1995	92	1260	Circulation	
Lanza	1995	92	1260	Circulation	
Lanza	1997	23	863	Ultrasound in Medici	MEDLINE
Li	1996			US 5512294 A	HCAPLUS
Lohrmann	1996			US 5536489 A	
Long	1991			US 5077036 A	HCAPLUS
Milbrath	1995			US 5401634 A	HCAPLUS
Muzykantov	1994	35		Journal of Nuclear M	MEDLINE
Schneider	1993			US 5271928 A	HCAPLUS
Unger	1996			US 5542935 A	HCAPLUS
Unger	2000			US 6123923 A	HCAPLUS
Unger	2000			US 6139819 A	HCAPLUS

Unger	2002			US 6461586 B1	
Wallace	1995	92	1585	Circulation	
Wolf	1992			US 5114703 A	

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L27 ANSWER 23 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:282976 HCAPLUS Full-text
DOCUMENT NUMBER: 138:398300
TITLE: Synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes
AUTHOR(S): Bhattacharya, Santanu; Srivastava, Aasheesh
CORPORATE SOURCE: Department of Organic Chemistry, Indian Institute of Science, Bangalore, 560 012, India
SOURCE: Langmuir (2003), 19(10), 4439-4447
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

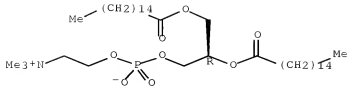
AB Novel gold nanoparticles bearing cationic single-chain, double-chain, and cholesterol based amphiphilic units have been synthesized. These nanoparticles represent size-stable entities in which various cationic lipids have been immobilized through their thiol group onto the gold nanoparticle core. The resulting colloids have been characterized by UV-vis, 1H NMR, FT-IR spectroscopy, and TEM. The average size of the resultant nanoparticles could be controlled by the relative bulkiness of the capping agent. Thus, the average diams. of the nanoparticles formed from the cationic single-chain, double-chain, and cholesterol based thiolate-coated materials were 5.9, 2.9, and 2.04 nm, resp. We also examined the interaction of these cationic gold nanoparticles with vesicular membranes generated from dipalmitoylphosphatidylcholine (DPPC) lipid suspensions. Nanoparticle doped DPPC vesicular suspensions displayed a characteristic surface plasmon band in their UV-vis spectra. Inclusion of nanoparticles in vesicular suspensions led to increases in the aggregate diams., as evidenced from dynamic light scattering. Differential scanning calorimetric examination indicated that incorporation of single-chain, double-chain, and cholesteryl-linked cationic nanoparticles exert variable effects on the DPPC melting transitions. While increased doping of single-chain nanoparticles in DPPC resulted in the phases that melt at higher temps., inclusion of an incremental amount of double-chain nanoparticles caused the lowering of the melting temperature of DPPC. On the other hand, the cationic cholesteryl nanoparticle interacted with DPPC in membranes in a manner somewhat analogous to that of cholesterol itself and caused broadening of the DPPC melting transition.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 9-14 (Biochemical Methods)
ST synthesis lipid cholesterol coated gold nanoparticle dipalmitoylphosphatidylcholine membrane
IT Differential scanning calorimetry
IR spectroscopy
Light scattering
NMR spectroscopy
Nanoparticles
Surface plasmon
Transmission electron microscopy
UV and visible spectroscopy
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
IT Membranes, nonbiological
(vesicular; synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
IT 57-88-5, Cholesterol, analysis 63-89-8, Dipalmitoylphosphatidylcholine
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
IT 529496-11-5P
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
IT 7440-57-5, Gold, uses
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
IT 249288-57-1
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
IT 352517-88-5P 529496-10-4P
(synthesis and characterization of novel cationic lipid and cholesterol-coated gold nanoparticles and their interactions with dipalmitoylphosphatidylcholine membranes)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alivisatos, A	1996	382	609	Nature	HCAPLUS
Alvarez, M	1997	101	3706	J Phys Chem B	HCAPLUS
Bhattacharya, S	2000	1467	39	Biochim Biophys Acta	HCAPLUS
Bhattacharya, S	1995	11	4748	Langmuir	HCAPLUS
Bhattacharya, S	2001	17	2067	Langmuir	HCAPLUS
Brust, M	1994		801	J Chem Soc, Chem Com	HCAPLUS

Brust, M	1995		1665	J Chem Soc, Chem Com	
Chen, S	1998	280	2098	Science	HCAPLUS
Cliffel, D	2000	16	9699	Langmuir	HCAPLUS
Dileep, P	2001	509	327	FEBS Lett	HCAPLUS
Elghaninan, R	1997	227	1078	Science	
Enustun, B	1963	85	3317	J Am Chem Soc	HCAPLUS
Faraday, M	1857	147	145	Philos Trans R Soc L	
Ghosh, Y	2002	13	378	Bioconjugate Chem	HCAPLUS
Ghosh, Y	2000	473	341	FEBS Lett	HCAPLUS
Ghosh, Y	2001	105	10257	J Phys Chem B	HCAPLUS
Giersig, M	1993	9	3408	Langmuir	HCAPLUS
Haldar, J	2001	40	1228	Angew Chem, Int Ed	HCAPLUS
Hicks, J	1999	71	3703	Anal Chem	HCAPLUS
Hoffman, A	1991	95	525	J Phys Chem	
Hostetler, M	1996	12	3604	Langmuir	HCAPLUS
Hostetler, M	1998	14	17	Langmuir	HCAPLUS
Ingram, R	1997	119	9279	J Am Chem Soc	HCAPLUS
Kumar, A	2001	13	341	Adv Mater	HCAPLUS
Lackowicz, J	2000	280	128	Anal Biochem	
Leff, D	1995	99	7036	J Phys Chem	HCAPLUS
Link, S	1999	103	4212	J Phys Chem B	HCAPLUS
Mahtab, R	2000	122	14	J Am Chem Soc	HCAPLUS
McIntosh, C	2001	123	7626	J Am Chem Soc	HCAPLUS
Mirkin, C	1996	382	607	Nature	HCAPLUS
Mulvaney, P	1996	12	788	Langmuir	HCAPLUS
Niemeyer, C	2001	40	4128	Angew Chem, Int Ed	HCAPLUS
Niemeyer, C	1998	37	2265	Angew Chem, Int Ed E	HCAPLUS
Nuzzo, R	1987	109	2358	J Am Chem Soc	HCAPLUS
Sandhu, K	2002	13	3	Bioconjugate Chem	HCAPLUS
Sarathy, K	1997	101	9876	J Phys Chem B	HCAPLUS
Sastry, M	1997	101	4954	J Phys Chem	HCAPLUS
Sellers, H	1993	115	9389	J Am Chem Soc	HCAPLUS
Shon, Y	2001	17	1255	Langmuir	HCAPLUS
Slot, J	1985	38	87	Eur J Cell Biol	MEDLINE
Storhoff, J	1999	99	1849	Chem Rev	HCAPLUS
Taton, T	2000	122	6305	J Am Chem Soc	HCAPLUS
Templeton, A	2000	33	27	Acc Chem Res	HCAPLUS
Templeton, A	1999	121	7081	J Am Chem Soc	HCAPLUS
Templeton, A	2000	16	6682	Langmuir	HCAPLUS
Ulman, A	1996	96	1533	Chem Rev	HCAPLUS
Yonezawa, T	1999		1061	Chem Lett	HCAPLUS

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

L27 ANSWER 24 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:266425 HCAPLUS Full-text
DOCUMENT NUMBER: 138:403071
TITLE: Lateral diffusion dynamics for single molecules of fluorescent cyanine dye at the free and surfactant-modified dodecane-water interface
AUTHOR(S): Hashimoto, Fumi; Tsukahara, Satoshi; Watarai, Hitoshi
CORPORATE SOURCE: Department of Chemistry, Graduate School of Science, Osaka University, Toyonaka, Osaka, 560-0043, Japan
SOURCE: Langmuir (2003), 19(10), 4197-4204
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English

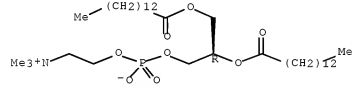
AB The present study proposed a single mol. probing of transport properties of the nanoregion of liquid-liquid interfaces. Fluorescence from single mols. of 1,1'-dioctadecyl-3,3,3',3'-tetramethylindocarbocyanine perchlorate (DiI) adsorbed at a dodecane-water interface was detected in the absence and presence of an anionic or zwitterionic surfactant by total internal reflection fluorescence microscopy with a single photon counting device. Intermittent photon bundles from single DiI mols. were observed in time-resolved photon counting measurements, when the average number of interfacial DiI mols. was less than 1 in the observation area (830 nm in diameter). Photon signals emitted by the same DiI mol. in the observation area were discriminated with the time interval between two photon signals. The lateral diffusion coefficient of single DiI mols. was obtained from the maximum duration of the photon bundle, the interfacial viscosity was obtained from the diffusion coefficient of the single DiI mols., and the fluorescence quantum yield of single DiI mols. was obtained from the d. of the photon bundles. The adsorption of surfactant at the interface reduced the lateral diffusion coefficient of single DiI mols. by an increase in the interfacial viscosity.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(effect on diffusion dynamics for single mols. of fluorescent cyanine dye at water-dodecane interface)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 46, 73

IT Surfactants
(anionic; effect on diffusion dynamics for single mols. of fluorescent cyanine dye at water-dodecane interface)

IT Surfactants
(zwitterionic; effect on diffusion dynamics for single mols. of fluorescent cyanine dye at water-dodecane interface)

IT 151-21-3, Sodium dodecyl sulfate, uses 18194-24-6, Dimyristoylphosphatidylcholine
(effect on diffusion dynamics for single mols. of fluorescent cyanine dye at water-dodecane interface)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adalsteinsson, T	2000	16	9410	Langmuir	HCAPLUS
Barton, A	1983		64	CRC Handbook of Solu	
Bonfillon, A	1994	168	497	J Colloid Interface	HCAPLUS
Funatsu, T	1995	374	555	Nature	HCAPLUS

Garner, A	1977	45	432	Chem Phys Lett	HCAPLUS
Hashimoto, F	2001	17	181	Anal Sci	
Hughes, B	1981	110	349	J Fluid Mech	HCAPLUS
Imahori, K	1998			Seikagaku jiten (Enc	
Ishii, Y	2000	1	5	Single Mol	HCAPLUS
Ishijima, A	1998	92	161	Cell	HCAPLUS
Ishikawa, M	1994	33	1571	Jpn J Appl Phys	HCAPLUS
Ke, P	2001	17	3727	Langmuir	HCAPLUS
Ke, P	2001	17	5076	Langmuir	HCAPLUS
Kikuchi, K	1989			JOEM Handbook 1 Trip	
McCreery, R	2000			Raman Spectroscopy f	
Nie, S	1995	67	2849	Anal Chem	HCAPLUS
Onoe, Y	1998	14	237	Anal Sci	HCAPLUS
Onoe, Y	1998	71	603	Bull Chem Soc Jpn	HCAPLUS
Rigler, R	2001			Fluorescence Correla	
Rupert, L	1988	92	4416	J Phys Chem	HCAPLUS
Saffman, P	1976	73	593	J Fluid Mech	
Silcock, H	1979	1		Solubility of Inorga	
Tokunaga, M	1997	235	47	Biochem Biophys Res	HCAPLUS
Trautman, J	1996	205	221	Chem Phys	HCAPLUS
Tsukahara, S	2000	16	6787	Langmuir	HCAPLUS
Volkov, A	1996			Liquid-Liquid Interf	
Walde, P	1997	101	7390	J Phys Chem B	HCAPLUS
Watarai, H	1997	70	957	Bull Chem Soc Jpn	HCAPLUS
Watarai, H	1995		283	Chem Lett	HCAPLUS
Watarai, H	1996	12	6717	Langmuir	HCAPLUS
Watarai, H	2001	19	155	Solvent Extr Ion Exc	HCAPLUS
Watarai, H	1993	12	313	Trends Anal Chem	HCAPLUS
Wirth, M	1998	70	5264	Anal Chem	HCAPLUS
Wohlfarth, C	1996			Refractive Indices o	
Xu, X	1997	275	1106	Science	HCAPLUS
Xu, X	1998	281	1650	Science	HCAPLUS
Yip, W	1998	102	7564	J Phys Chem A	HCAPLUS

OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L27 ANSWER 25 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:134062 HCAPLUS Full-text

DOCUMENT NUMBER: 138:309777

TITLE: Nanoscale Patterning of Adsorbed Amphiphile Films with an Atomic Force Microscope Probe

AUTHOR(S): Sakai, Hideki; Yokoyama, Wakako; Rathman, James F.; Abe, Masahiko

CORPORATE SOURCE: Faculty of Science and Technology, Tokyo University of Science, Chiba, 278-8510, Japan

SOURCE: Langmuir (2003), 19(7), 2845-2850
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A contact mode scanning atomic force microscope (AFM) probe was found to allow the adsorbed film on mica of dialkyldimethylammonium bromides (DADBs) prepared from their vesicular suspensions to spread in a position-selective way. Such growth of an adsorbed film was shown to be peculiar to double-chain-type surfactants bearing a cationic moiety including DADB and dipalmitoylphosphatidylcholine, and neither cationic single-chain-type surfactants nor anionic double-chain-type amphiphiles exhibited such growth behavior. This type of film growth was suggested to arise from the breakdown of vesicles on the mica substrate caused by the scanning of the contact mode

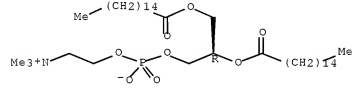
AFM probe because (1) the film growth depended on the magnitude of the force given by the probe and (2) it was observed with adsorbed films prepared from vesicular suspensions but not with those prepared by the Langmuir-Blodgett method. Moreover, this technique was shown to permit the nanoscale patterning of amphiphilic mols. including phospholipids.

IT 63-89-8, Dppc
(nanoscale patterning of adsorbed amphiphile films from vesicle)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 66-3 (Surface Chemistry and Colloids)
Section cross-reference(s): 6

ST nanoscale patterning amphiphile film AFM adsorption vesicle

IT Surface structure
(AFM images; nanoscale patterning of adsorbed amphiphile films from vesicle studied using)

IT Films
Liposomes
(nanoscale patterning of adsorbed amphiphile films from vesicle)

IT Contact angle
(nanoscale patterning of adsorbed amphiphile films from vesicle studied using)

IT Atomic force microscopy
(nanoscale patterning of adsorbed amphiphile films from vesicle using)

IT Mica-group minerals, uses
(substrate; nanoscale patterning of adsorbed amphiphile films from vesicle)

IT 63-89-8, Dppc 3282-73-3, Didodecyldimethylammonium bromide 3700-67-2, Dioctadecyldimethylammonium bromide 4537-77-3, Dppg 68105-02-2, Ditetradecyldimethylammonium bromide 70755-47-4, Dihexadecyldimethylammonium bromide
(nanoscale patterning of adsorbed amphiphile films from vesicle)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bayer, T	1990	50	357	Biophys J	
Biggs, S	1995	11	156	Langmuir	HCAPLUS
Butt, H	1991	60	1438	Biophys J	HCAPLUS
Clack, G	1936	58	2199	J Appl Phys	
Doudevski, I	2000	174	233	Colloids Surf	HCAPLUS

Drake, B	1989	243	1586	Science	MEDLINE
Ducker, W	1991	353	241	Nature	
Dufrene, Y	2000	1509	14	Biochim Biophys Acta	HCAPLUS
Egawa, H	1999	15	1660	Langmuir	HCAPLUS
Ellis, J	1964	19	755	J Colloid Interface	HCAPLUS
Esumi, K	1993	9	622	Langmuir	HCAPLUS
Fujii, M	1996	45	181	J Jpn Oil Chem Soc	
Fujii, M	2001	17	1138	Langmuir	HCAPLUS
Herder, C	1989	90	5801	J Chem Phys	HCAPLUS
Jackson, S	1986	85	291	Faraday Discuss Chem	
Kalb, E	1992	1103	307	Biochim Biophys Acta	HCAPLUS
Kimura, F	1986	2	96	Langmuir	HCAPLUS
Kumar, S	2000	16	9936	Langmuir	HCAPLUS
Mau, J	1994	33	4439	Biochemistry	
Merkel, T	1989	50	1535	J Phys (Paris)	
Mizushima, K	1987	26	772	Jpn J Appl Phys	HCAPLUS
Nollert, P	1995	69	1447	Biophys J	HCAPLUS
Pashley, R	1988	126	569	J Colloid Interface	HCAPLUS
Quist, P	1995	172	510	J Colloid Interface	HCAPLUS
Radler, J	1995	11	4539	Langmuir	
Sakai, H	2001	6	1817	Langmuir	
Sakai, K	1988	53	1274	Appl Phys Lett	
Stipp, S	1996	12	1884	Langmuir	HCAPLUS
Sui, S	1988	27	7463	Biochemistry	HCAPLUS
Tamm, L	1985	47	105	Biophys J	HCAPLUS
Thomson, N	2000	16	4813	Langmuir	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L27 ANSWER 26 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:89988 HCAPLUS Full-text

DOCUMENT NUMBER: 138:250442

TITLE: Refolding of Adsorbed Bovine α-Lactalbumin during Surfactant Induced Displacement from a Hydrophobic Interface

AUTHOR(S): Engel, Maarten F. M.; Visser, Antonie J. W. G.; van Mierlo, Carlo P. M.

CORPORATE SOURCE: Laboratory of Biochemistry, Wageningen University, Wageningen, 6703 HA, Neth.

SOURCE: Langmuir (2003), 19(7), 2929-2937
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Little is known about the changes in protein conformation that occur after displacement of a protein from an interface. Here, results are presented that give insight into the conformation of bovine α-lactalbumin (BLA) mols. that are displaced from a hydrophobic polystyrene interface. After the BLA mols. are adsorbed on polystyrene nanospheres, they are displaced from these nanospheres using two surfactants: Tween 20 and CHAPS. The properties of displaced BLA depend on the concentration of the surfactant used to displace the protein and on the incubation time during displacement, as can be concluded from intrinsic fluorescence spectroscopy, CD spectroscopy, and nondenaturing gel electrophoresis. CHAPS is more effective in displacing adsorbed BLA than Tween 20. The largest amount of displaced BLA (90% recovery) is obtained at a CHAPS concentration of 2 mM or higher. At a surfactant concentration of 1 or 2 mM, displaced BLA contains calcium and has native spectroscopic properties, indicating that BLA, which has a molten globule-like conformation in the adsorbed state, refolds to its native state upon displacement from the surface. However, non-native properties of

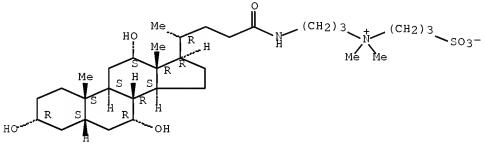
displaced BLA are observed at a low surfactant concentration (0.3 mM) after prolonged incubation times. Under these conditions, the ensemble of displaced BLA mols. contains calcium, has a native-like secondary structure, has a non-native tertiary structure, and contains a population of mols. that has a higher electrophoretic mobility on non-denaturing gels compared to that of native BLA. Intramol. disulfide shuffling can cause the observed conformational changes. The disulfide shuffling is initiated by a few reactive groups on the surface of the nanospheres. It occurs during the homol. exchange of proteins at a surfactant concentration of 0.3 mM and is time dependent. Both Tween 20 and CHAPS are good candidates for the removal of proteins from interfaces, as long as the incubation time is short and the surfactant concentration is above a certain threshold. The displacement procedure presented here is essential for the future study of the atomic details of the conformation of proteins adsorbed on interfaces using NMR spectroscopy in combination with H/D exchange measurements.

IT 75621-03-3, CHAPS
(surfactant; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 6-3 (General Biochemistry)

ST adsorbed alpha lactalbumin refolding surfactant displacement hydrophobic interface

IT Desorption
(displacement; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT Interface
(hydrophobic; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT Disulfide group
(intramol., shuffling; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT Secondary structure
Tertiary structure
(protein; refolding of adsorbed bovine α-lactalbumin during

surfactant induced displacement from a hydrophobic interface)

IT Conformational transition
Surfactants
(refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT Protein folding
(refolding; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT Lactalbumins
(α-; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT 7440-70-2, Calcium, biological studies
(bound to α-lactalbumin; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT 9003-53-6, Polystyrene
(nanospheres; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

IT 9005-64-5, Tween 20 75621-03-3, CHAPS
(surfactant; refolding of adsorbed bovine α-lactalbumin during surfactant induced displacement from a hydrophobic interface)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Andrade, J	1986	79	1	Adv Polym Sci	HCAPLUS
Baszkin, A	2000			Physical chemistry o	
Cawthern, K	1996	5	1394	Protein Sci	HCAPLUS
Clark, D	1991	59	209	Colloids Surf	HCAPLUS
Courthaudon, J	1991	10	109	Food Struct	HCAPLUS
Elwing, H	1989	128	296	J Colloid Interface	HCAPLUS
Engel, M	2002	277	10922	J Biol Chem	HCAPLUS
Ewbank, J	1991	350	518	Nature	HCAPLUS
Feng, M	1995	7	415	J Biomater Sci, Poly	HCAPLUS
Giacomelli, C	2000	16	4853	Langmuir	HCAPLUS
Helenius, A	1979	56	734	Methods Enzymol	HCAPLUS
Hjelmeland, L	1990	182	253	Methods Enzymol	HCAPLUS
Killian, J	2000	25	429	Trends Biochem Sci	HCAPLUS
Kowalewski, T	1999	96	3688	Proc Natl Acad Sci U	HCAPLUS
Mackie, A	1999	210	157	J Colloid Interface	HCAPLUS
Maste, M	1996	180	632	J Colloid Interface	HCAPLUS
Norde, W	2000	79	259	J Biotechnol	HCAPLUS
Schagger, H	1987	166	368	Anal Biochem	MEDLINE
Schladitz, C	1999	77	3305	Biophys J	HCAPLUS
Smith, L	1992	1121	111	Biochim Biophys Acta	HCAPLUS
Wilde, P	1993	155	48	J Colloid Interface	HCAPLUS
Womack, M	1983	733	210	Biochim Biophys Acta	HCAPLUS

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L27 ANSWER 27 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:943796 HCAPLUS Full-text
DOCUMENT NUMBER: 138:333852

TITLE: Hydrogen/deuterium exchange of hydrophobic peptides in model membranes by electrospray ionization mass spectrometry

AUTHOR(S): Hansen, Raino K.; Broadhurst, R. William; Skelton, Paul C.; Arkin, Isaiah T.

CORPORATE SOURCE: Department of Biochemistry, University of Cambridge, Cambridge Centre for Molecular Recognition, Cambridge, UK

SOURCE: Journal of the American Society for Mass Spectrometry (2002), 13(12), 1376-1387
CODEN: JAMSEF; ISSN: 1044-0305

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

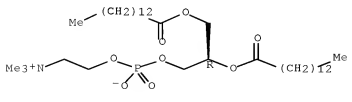
AB We demonstrate here that the hydrogen/deuterium solvent exchange (HDX) properties of the transmembrane fragment of the M2 protein of Influenza A (M2-TM) incorporated into lipid vesicles or detergent micelles can be studied with straightforward electrospray (ESI) and nanospray mass spectrometry (MS) configurations provided that key factors, including sample preparation techniques, are optimized. Small unilamellar vesicle prepns. were obtained by solubilizing dimyristoyl phosphatidylcholine (DMPC) and the M2-TM peptide in aqueous solution with n-octyl-β-D-glycopyranoside, followed by dialysis to remove the detergent. Electron microscopy expts. revealed that subsequent concentration by centrifugation introduced large multilamellar aggregates that were not compatible with ESI-MS. By contrast, a lyophilization-based concentration procedure, followed by thawing above the liquid crystal transition temperature of the lipid component, maintained the liposome size profile and yielded excellent ion fluxes in both ESI-MS and nano-ESI-MS. Using these methods the global HDX profile of M2-TM in aqueous DMPC vesicles was compared with that in methanol, demonstrating that several amide sites were protected from exchange by the lipid membrane. We also show that hydrophobic peptides can be detected by ESI-MS in the presence of a large molar excess of the detergent Triton X-100. The rate of HDX of M2-TM in Triton X-100 micelles was faster than that in DMPC vesicles but slower than when the peptide had been denatured in methanol. These results indicate that the accessibility of backbone amide sites to the solvent can be profoundly affected by membrane protein structure and dynamics, as well as the properties of model bilayer systems.

IT 18194-24-6, Dimyristoyl phosphatidylcholine
(Hydrogen/deuterium exchange of hydrophobic peptides in model membranes by electrospray ionization mass spectrometry)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 9-5 (Biochemical Methods)

IT 18194-24-6, Dimyristoyl phosphatidylcholine 29836-26-8
(Hydrogen/deuterium exchange of hydrophobic peptides in model membranes by electrospray ionization mass spectrometry)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Akashi, S	2001	12	1247	J Am Soc Mass Spectr	HCAPLUS
Allen, T	1980	601	328	Biochim Biophys Acta	HCAPLUS
Alvarez, J	1987	262	3502	J Biol Chem	HCAPLUS
Arkin, I	1996	35	7233	Biochemistry	HCAPLUS
Arora, A	2001	11	540	Curr Opin Struct Bio	HCAPLUS
Ball, L	1998	7	758	Protein Sci	HCAPLUS
Booth, P	2001	36	501	Crit Rev Biochem Mol	HCAPLUS
Bouchard, M	2000	78	1010	Biophys J	HCAPLUS
Bowie, J	2001	11	397	Curr Opin Struct Bio	HCAPLUS
Castrucci, M	1997	238	128	Virology	HCAPLUS
Cherney, L	1999	378	167	J Fluid Mech	HCAPLUS
Cotten, M	1999	76	1179	Biophys J	HCAPLUS
de Juan, L	1997	186	280	J Colloid Interf Sci	HCAPLUS
de la Mora, J	1994	260	155	J Fluid Mech	
Demmers, J	2001	276	34501	J Biol Chem	HCAPLUS
Demmers, J	2000	97	3189	Proc Natl Acad Sci U	HCAPLUS
Dempsey, C	1992	31	11973	Biochemistry	HCAPLUS
Figueroa, I	1999	10	719	J Am Soc Mass Spec	HCAPLUS
Fischer, W	2002	1561	27	Biochim Biophys Acta	HCAPLUS
Forrest, L	2000	78	55	Biophys J	HCAPLUS
Frederiksen, L	1997	86	921	J Pharm Sci	HCAPLUS
Ghaemmaghami, S	2000	97	8296	Proc Natl Acad Sci U	HCAPLUS
Gould, R	1981	20	6776	Biochemistry	HCAPLUS
Grohmann, F	1998	276	66	Colloid Polym Sci	HCAPLUS
Hay, A	1985	4	3021	EMBO J	HCAPLUS
Hernandez, H	2001	276	46685	J Biol Chem	HCAPLUS
Hull, J	1998	106	1489	J Cell Biol	
Kukol, A	1999	286	951	J Mol Biol	HCAPLUS
le Coutre, J	2001	39	4237	Biochemistry	
le Coutre, J	1997	94	10167	Proc Natl Acad Sci U	HCAPLUS
le Maire, M	1993	214	50	Anal Biochem	HCAPLUS
le Maire, M	2000	1508	86	Biochim Biophys Acta	HCAPLUS
Lerro, K	1993	215	38	Anal Biochem	HCAPLUS
Lichtenberg, D	1988	33	337	Methods Biochem Anal	HCAPLUS
Lund, S	1989	264	4907	J Biol Chem	HCAPLUS
Pinheiro, T	2000	303	617	J Mol Biol	HCAPLUS
Pinto, L	1997	94	11301	Proc Natl Acad Sci U	HCAPLUS
Reynolds, J	1970	245	5161	J Biol Chem	HCAPLUS
Rothschild, K	1993	268	27046	J Biol Chem	HCAPLUS
Santoni, V	2000	21	1054	Electrophoresis	HCAPLUS
Sharp, D	1956	19	13	Biochim Biophys Acta	MEDLINE
Siuzdak, G	1995	34	2053	Angew Chem Int Ed	HCAPLUS
Takeda, M	2002	76	1391	J Virol	HCAPLUS
Tang, K	1994	6	2317	Phys Fluids	
Taylor, S	1964	280	383	Proc Roy Soc A	
Veglia, G	2002	82	2176	Biophys J	HCAPLUS
Wang, J	2001	10	2241	Protein Sci	HCAPLUS
Whitelegge, J	1999	96	10695	Proc Natl Acad Sci U	HCAPLUS
Wilm, M	1996	379	466	Nature	HCAPLUS
Wong, M	1982	21	4133	Biochem	HCAPLUS
Woods, V	2001	37	89	J Cell Biochem	
Wu, Y	1997	32	616	J Mass Spectrom	HCAPLUS

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (10 CITINGS)

L27 ANSWER 28 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:855049 HCAPLUS Full-text
DOCUMENT NUMBER: 138:104348
TITLE: Nanostructure Changes in Lung Surfactant Monolayers Induced by Interactions between Palmitoyloleoylphosphatidylglycerol and Surfactant Protein B
AUTHOR(S): Ding, Junqi; Doudevski, Ivo; Warriner, Heidi E.; Alig, Timothy; Zasadzinski, Joseph A.; Waring, Alan J.; Sherman, Mark A.
CORPORATE SOURCE: Department of Chemical Engineering, University of California, Santa Barbara, CA, 93106-5080, USA
SOURCE: Langmuir (2003), 19(5), 1539-1550
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

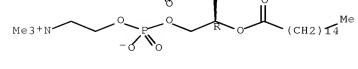
AB Developing synthetic lung surfactants to replace animal exts. requires a fundamental understanding of the roles of the various lipids and proteins in native lung surfactant. We used Brewster angle microscopy (BAM), atomic force microscopy (AFM), and Langmuir isotherms to study the influence of palmitoyloleoylphosphatidylglycerol (POPG) in monolayers of dipalmitoylphosphatidylcholine and palmitic acid mixts. with or without dSP-B1-25, a peptide dimer based on the first 25 amino acids of surfactant protein B (SP-B). At surface pressures between 30 and 40 mN/m, only monolayers containing POPG and dSP-B1-25 showed plateaus in the isotherm similar to those in Survanta, a bovine extract replacement lung surfactant that contains native SP-B and SP-C proteins. BAM images show distinct morphol. changes in the fluid phase during these plateaus, while AFM images of deposited monolayers show that multilayer structures, which we named " nanosilos", form in the fluid phase at the plateau. These nanosilos are from 50 to 300 nm in diameter and from 5 to 8 nm in height and are similar to those observed in deposited Survanta monolayers. We propose that POPG and SP-B interact to stabilize the monolayer composition by trapping POPG in 3-dimensional surface-associated aggregates at high surface pressures, preventing the irreversible loss of POPG and SP-B to the subphase.

IT 63-89-8, DPPC
(nanostructure changes in lung surfactant monolayers induced by interactions between palmitoyloleoylphosphatidylglycerol and surfactant protein B)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 13-6 (Mammalian Biochemistry)
Section cross-reference(s): 9
ST surfactant protein B palmitoyloleoylphosphatidylglycerol interaction; nanostructure lung surfactant palmitoyloleoylphosphatidylglycerol interaction
IT Surfactant proteins (pulmonary)
(SP-B; nanostructure changes in lung surfactant monolayers induced by interactions between palmitoyloleoylphosphatidylglycerol and surfactant protein B)
IT Aggregates
Lung
Surfactants
(nanostructure changes in lung surfactant monolayers induced by interactions between palmitoyloleoylphosphatidylglycerol and surfactant protein B)
IT Self-association
(od proteins; nanostructure changes in lung surfactant monolayers induced by interactions between palmitoyloleoylphosphatidylglycerol and surfactant protein B)
IT 57-10-3, Palmitic acid, biological studies 63-89-8, DPPC 185435-28-3
(nanostructure changes in lung surfactant monolayers induced by interactions between palmitoyloleoylphosphatidylglycerol and surfactant protein B)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Akinbi, H	1997	272	9640	J Biol Chem	HCAPLUS
Andersson, M	1995	362	328	FEBS Lett	HCAPLUS
Baatz, J	1990	29	6714	Biochemistry	HCAPLUS
Bastacky, J	1995	79	1615	J Appl Physiol	MEDLINE
Beck, D	2000	275	3365	J Biol Chem	HCAPLUS
Bernhard, W	2000	162	1524	Am J Crit Care Med	MEDLINE
Body, D	1971	6	625	Lipids	HCAPLUS
Bringezu, F	2001	17	4641	Langmuir	HCAPLUS
Bringezu, F	2002	18	2319	Langmuir	HCAPLUS
Ding, J	2001	80	2262	Biophys J	HCAPLUS
Ding, J	2002	18	2800	Langmuir	HCAPLUS
Ding, J	2002	88	168201	Phys Rev Lett	
Goerke, J	1998	1408	79	Biochim Biophys Acta	HCAPLUS
Gordon, L	2000	55	330	J Pept Res	HCAPLUS
Hallman, M	1976	125	613	Am J Obstet Gynecol	HCAPLUS
Hallman, M	1977	11	714	Pediatr Res	HCAPLUS
Hawgood, S	1998	1408	150	Biochim Biophys Acta	HCAPLUS
Henon, S	1991	62	936	Rev Sci Instrum	HCAPLUS
Honig, D	1992	210/2	64	Thin Solid Films	
Ingenito, E	2000	161	831	Am J Respir Crit Car	MEDLINE
Ingenito, E	1999	86	1702	J Appl Physiol	HCAPLUS
Johansson, J	1998	1408	161	Biochim Biophys Acta	HCAPLUS
Johansson, J	1997	244	675	Eur J Biochem	HCAPLUS
Krol, S	2000	79	904	Biophys J	HCAPLUS
Krueger, M	2000	229	353	J Colloid Interface	HCAPLUS
Lee, K	2002	116	774	J Chem Phys	HCAPLUS

Lee, K	1998	14	2567	Langmuir	HCAPLUS
Lee, K	1998	3273	115	Proc SPIE-Int Soc Op	HCAPLUS
Liepinsh, E	1997	4	793	Nat Struct Biol	HCAPLUS
Lipp, M	1997	72	2783	Biophys J	HCAPLUS
Lipp, M	1998	81	1650	Phys Rev Lett	HCAPLUS
Lipp, M	1996	273	1196	Science (Washington,	HCAPLUS
Munford, R	1995	36	1653	J Lipid Res	HCAPLUS
Notter, R	2000	149		Lung surfactants:Bas	
Pastrana-Rios, B	1994	33	5121	Biochemistry	HCAPLUS
Poulain, F	1995	162	43	West J Med	MEDLINE
Richards, F	1977	6	151	Annu Rev Biophys Bio	HCAPLUS
Robertson, B	1998	1408	346	Biochim Biophys Acta	HCAPLUS
Rooney, S	1974	360	56	Biochim Biophys Acta	HCAPLUS
Schurch, S	1998	1408	180	Biochim Biophys Acta	HCAPLUS
Schurch, S	1976	73	4698	Proc Natl Acad Sci U	MEDLINE
Schurch, S	1978	75	3417	Proc Natl Acad Sci U	MEDLINE
Shelley, S	1984	19	857	Lipids	HCAPLUS
Shelley, S	1982	160	195	Lung	HCAPLUS
Shiffer, K	1988	27	2689	Biochemistry	HCAPLUS
Takamoto, D	2001	81	153	Biophys J	HCAPLUS
Tanaka, Y	1983	31	4100	Chem Pharm Bull	HCAPLUS
Tanaka, Y	1986	27	475	J Lipid Res	HCAPLUS
Taneva, S	1994	66	1137	Biophys J	HCAPLUS
Taneva, S	1994	66	1149	Biophys J	HCAPLUS
Taneva, S	1994	66	1158	Biophys J	HCAPLUS
Tchoreloff, P	1989	3	41	Congr Int Technol Ph	HCAPLUS
Veldhuizen, E	2000	79	377	Biophys J	HCAPLUS
Veldhuizen, R	1998	1408	90	Biochim Biophys Acta	HCAPLUS
Walther, F	1997	156	855	Am J Respir Crit Car	MEDLINE
Walther, F	2000	71	342	Mol Genet Metab	HCAPLUS
Warriner, H	2002	82	835	Biophys J	HCAPLUS
Weaver, T	2001	63	555	Annu Rev Physiol	HCAPLUS
Weaver, T	1999	76	15	Biol Neonate	HCAPLUS
Yu, S	1983	18	522	Lipids	HCAPLUS
Zaltash, S	2000	1466	179	Biochim Biophys Acta	HCAPLUS
Zasadzinski, J	2001	6	506	Curr Opin Colloid In	HCAPLUS

OS.CITING REF COUNT: 46 THERE ARE 46 CAPLUS RECORDS THAT CITE THIS RECORD (46 CITINGS)

L27 ANSWER 29 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:658884 HCAPLUS Full-text

DOCUMENT NUMBER: 137:389546

TITLE: Fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants

AUTHOR(S): Hassenkam, Tue; Norgaard, Kasper; Iversen, Lars; Kiely, Christopher J.; Brust, Mathias; Bjornholm, Thomas

CORPORATE SOURCE: Nano-Science Center, The University of Copenhagen, Kobenhavn, DK-2100, Den.

SOURCE: Advanced Materials (Weinheim, Germany) (2002), 14(16), 1126-1130
CODEN: ADVMEW; ISSN: 0935-9648

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An extensive comparative transmission electron microscopy (TEM) and atomic force microscopy (AFM) study of Langmuir-Blodgett films of gold nanoparticle/dipalmitoylphosphatidylcholine (DPPC) mixts. transferred onto

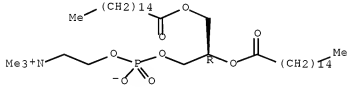
solid substrates at different surface pressures has been conducted to monitor the process of nanostructure formation. Dodecanthiol-capped gold nanoparticles of 1.5-3 nm diameter were prepared according to a well-established two-phase liquid/liquid reduction route. The surfactant systems at the air/water interface can be used as 2D templates for the self-assembly of metallic nanostructures. The complexity of the surfactant phase behavior may be used to regulate the formation of structures on the micrometer scale, while their mol. structure can influence assembly processes on the nanometer scale. The dodecanethiol-capped gold nanoparticles of 1.5-3 nm diameter in a matrix of DPPC, at the air/water interface, self-assemble into a maze of continuous gold nanowires resembling a mol. electronic circuit board. These nanostructures can to some extent be controlled by adjusting the parameters that affect the self-assembly process.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 66-3 (Surface Chemistry and Colloids)

ST gold nanowire nanoparticle self assembly surfactant dipalmitoylphosphatidylcholine

IT Chemisorption
Langmuir-Blodgett films
Nanoparticles
Nanowires
Self-assembly
Surface
(fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants)

IT Surfactants
(nonionic; fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants)

IT 112-55-0, 1-Dodecanethiol
(adsorbate; fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants)

IT 7440-57-5, Gold, processes
(fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants)

IT 63-89-8, Dipalmitoylphosphatidylcholine

(fabrication of 2D gold nanowires by self-assembly of gold nanoparticles on water surfaces in the presence of surfactants)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1999	5		Acc Chem Res	
Bjornholm, T	1998	120	7643	J Am Chem Soc	HCAPLUS
Bjornholm, T	1999	9	1975	J Mater Chem	HCAPLUS
Brust, M	1994		801	J Chem Soc, Chem Com	HCAPLUS
Chen, S	2001	17	2878	Langmuir	HCAPLUS
Chung, S	1998	102	6685	J Phys Chem B	HCAPLUS
Fendler, J	2001	13	3196	Chem Mater	HCAPLUS
Hostetler, M	1996	118	4212	J Am Chem Soc	HCAPLUS
Hutchinson, T	2001	13	1800	Adv Mater	HCAPLUS
Jensen, P	1999	71	1695	Rev Mod Phys	HCAPLUS
Kiely, C	1998	396	444	Nature	HCAPLUS
Li, M	1999	402	393	Nature	HCAPLUS
Moriarty, P	2001	64	297	Rep Prog Phys	HCAPLUS
Nielsen, L	2000	404	352	Nature	HCAPLUS
Pileni, M	2001	105	3358	J Phys Chem B	HCAPLUS
Sanchez, C	2001	13	3061	Chem Mater	HCAPLUS
Taylor, M	2001	348	27	Chem Phys Lett	HCAPLUS
Templeton, A	2000	33	27	Acc Chem Res	HCAPLUS
Whitesides, G	1991	254	1312	Science	HCAPLUS

OS.CITING REF COUNT: 64 THERE ARE 64 CAPLUS RECORDS THAT CITE THIS RECORD (65 CITINGS)

L27 ANSWER 30 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:570190 HCAPLUS Full-text

DOCUMENT NUMBER: 138:292587

TITLE: Flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis experiments

AUTHOR(S): Castelli, Francesco; Messina, Chiara; Sarpietro, Maria Grazia; Pignatello, Rosario; Puglisi, Giovanni

CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Universita di Catania, Catania, I-95125, Italy

SOURCE: AAPS PharmSciTech (2002), 3(2), No pp. given
CODEN: AAPHFZ; ISSN: 1522-1059
URL: http://ww.aapspharmscitech.org/scientificjournals/pharmscitech/volume3issue2/pt030209/pt030209.pdf

PUBLISHER: American Association of Pharmaceutical Scientists

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The present work investigated the release of Flurbiprofen (FLU) from Eudragit RS100 (RS) and Eudragit RL100 (RL) nanosuspensions to a biol. model membrane consisting of Dimyristoyl phosphatidylcholine (DMPC) multi-lamellar vesicles (MLV). This release was compared with those observed from solid drug particles as well as with dialysis expts. Nanosuspensions were prepared by a modification of Quasi-Emulsion Solvent Diffusion technique. Drug release was monitored by the Differential Scanning Calorimetry (DSC). FLU dispersed in MLV affects the transition temperature (Tm) of DMPC liposomes, causing a shift towards lower values. The temperature shift is modulated by the drug fraction present in the aqueous lipid bilayer suspension. DSC was also performed, after increasing incubation periods at 37°, on suspensions of blank liposomes

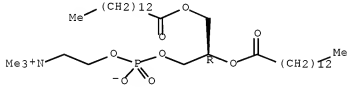
added to fixed amts. of unloaded and FLU-loaded nanosuspensions, as well as to powdered free drug. Tm shifts, caused by the drug released from the polymeric system or by free-drug dissoln. during incubation cycles, were compared with those caused by free drug increasing molar fractions dispersed directly in the membrane during their preparation These results were compared with the drug release and were followed by a classical dialysis technique. Comparing the suitability of the 2 different techniques in order to follow the drug release as well as the differences between the 2 RL and RS polymer systems, it is possible to confirm the efficacy of DSC in studying the release from polymeric nanoparticulate systems compared with the "classical" release test by dialysis. The different rate of kinetic release could be due to void liposomes, which represent a better uptaking system than aqueous solution in dialysis expts.

IT 18194-24-6, Dimyristoyl phosphatidylcholine
(flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 63-6 (Pharmaceuticals)

IT Differential scanning calorimetry
Dissolution
Phase transition
(flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

IT Drug delivery systems
(liposomes; flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

IT Dialysis
(microdialysis; flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

IT Drug delivery systems
(suspensions; flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

IT 18194-24-6, Dimyristoyl phosphatidylcholine 33434-24-1, Eudragit RS100
(flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

IT 5104-49-4, Flurbiprofen

(flurbiprofen release from eudragit RS and RL aqueous nanosuspensions: a kinetic study by DSC and dialysis expts.)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bach, D	1984		1	Biomembrane Structur	HCAPLUS
Bakan, J	1991		183	Microcapsules and Na	
Castelli, F	2000	21	821	Biomaterials	HCAPLUS
Castelli, F	2001	8	173	Drug Delivery	HCAPLUS
Castelli, F	1989	52	115	Int J Pharm	HCAPLUS
Castelli, F	1999	47	991	J Agr Food Chem	HCAPLUS
Castelli, F	1996	40	277	J Controlled Rel	HCAPLUS
Castelli, F	1997	45	103	J Controlled Rel	HCAPLUS
Cevc, G	1987		1	Cell biology:a serie	
David, S	1984			Microspheres and Dru	
Duzgunes, N	1985		193	Physical Methods on	HCAPLUS
Goto, S	1986	3	293	J Microencapsulation	HCAPLUS
Houslay, M	1983		40	Dynamics of Biologic	
Jain, M	1988		122	Introduction to biol	
Jain, M	1977	34	151	J Membrane Biol	
Jenquin, M	1994	10	23	Int J Pharm	
Jenquin, M	1990	79	811	J Pharm Sci	HCAPLUS
Jorgensen, K	1991	1062	227	Biochim Biophys Acta	MEDLINE
Kawashima, Y	1989	37	425	Chem Pharm Bull	HCAPLUS
Kawashima, Y	1992	40	196	Chem Pharm Bull	HCAPLUS
Kawashima, Y	1991	75	25	Int J Pharm	HCAPLUS
Kawata, M	1968	34	2618	Chem Pharm Bull	
Khalil, E	1999	25	419	Drug Dev Ind Pharmac	HCAPLUS
Lohner, K	1991	57	341	Chem Phys Lipids	HCAPLUS
Mabrey-Gaud, S	1981		105	Liposomes:From Physi	HCAPLUS
Marsh, D	1996		1	Nonmedical Applicati	HCAPLUS
Pignatello, R	2002	15	3247	Biomaterials	
Pignatello, R	2001	8	35	Drug Delivery	HCAPLUS
Pignatello, R				PharmSci Tech In pre	
Pignatello, R	1997	7	148	STP Pharma Sci	HCAPLUS
Raudino, A	1998	200	52	J Coll Interf Sci	HCAPLUS
Rouser, G	1970	5	494	Lipids	HCAPLUS
Seydel, J	1991	12	368	Trends Pharmacol Sci	HCAPLUS
Silvius, J	1991	57	241	Chem Phys Lipids	HCAPLUS
Tenchov, B	1991	57	165	Chem Phys Lipids	HCAPLUS
Thaller, V	2000	14	642	Eye	

L27 ANSWER 31 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:534480 HCAPLUS Full-text

DOCUMENT NUMBER: 137:213157

TITLE: Self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins

AUTHOR(S): Bayburt, Timothy H.; Grinkova, Yelena V.; Sligar, Stephen G.

CORPORATE SOURCE: Department of Biochemistry Department of Chemistry, The Beckman Institute, University of Illinois, Urbana, IL, 61801, USA

SOURCE: Nano Letters (2002), 2(8), 853-856
CODEN: NALEFD; ISSN: 1530-6984

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

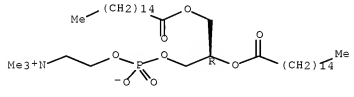
AB Nanoparticulate phospholipid bilayer disks were assembled from phospholipid and a class of amphipathic helical proteins termed membrane scaffold proteins (MSP). Several different MSPs were produced in high yield using a synthetic gene and a heterologous expression system and purified to homogeneity by a one-step purification The self-assembly process begins with a mixture of the phospholipid and MSP in the presence of a detergent. Upon removal of detergent, 10-nm diameter particles form containing either saturated or unsatd. phospholipid. The ratio of components in the initial mixture was found to be crucial for formation of a monodisperse population of nanoparticles. Exploration of the phase diagram of the lamellar to phospholipid-detergent mixed micelle transition reveals that self-assembly proceeds from the mixed micellar phase. In this case a homogeneous and monodisperse population is formed. In contrast, particle formation from the detergent-phospholipid lamellar phase results in altered size, yield, composition, and heterogeneity of the resultant particles. The nanodisks contain approx. 160 saturated or 125 unsatd. lipids and can be formed from designed amphipathic α-helical scaffold proteins. The 10-nm particles can thus contain two mols. of MSP1 or a single mol. of an MSP1 fusion (MSP2). The phospholipid bilayer main phase transition temperature is preserved in the nanodisks as determined by fluorescence spectroscopy. Scanning probe microscopy shows a monolayer of nanodisks on a mica surface with a diameter of 10 nm and the thickness of a single phospholipid bilayer (5.7 nm), confirming the presence of a bilayer domain. The gentle method of self-assembly and robustness of the resulting nanodisks provides a means for generating soluble lipid bilayer membranes on the nanometer scale and opens the possibility of using these nanostructures to incorporate single membrane proteins into a native-like environment.

IT 63-89-8, DPPC
(self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 9-16 (Biochemical Methods)

ST self assembly phospholipid bilayer nanoparticle membrane scaffold protein

IT Proteins
(membrane, scaffold, MSPs; self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)

IT Helix (conformation)
(protein; self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)

IT Bilayer membranes
Fluorometry
Micelles

Nanoparticles
Nanostructures
Phase diagram
Phase transition temperature
Self-assembly
(self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)
IT Synthetic gene
(self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)
IT Mica-group minerals, uses
(self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)
IT Phospholipids, processes
Proteins
(self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)
IT 63-89-8, DPPC 26662-91-9, POPC
(self-assembly of discoidal phospholipid bilayer nanoparticles with membrane scaffold proteins)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Almgren, M	2000	1508	146	Biochim Biophys Acta	HCAPLUS
Atkinson, D	1976	64	541	Eur J Biochem	HCAPLUS
Ausubel, F	1992			Short protocols in m	
Brouillette, C	1984	23	359	Biochemistry	HCAPLUS
Egelhaaf, S	1999	82	2804	Phys Rev Lett	HCAPLUS
Jonas, A	1986	128	553	Methods Enzymol	HCAPLUS
Koppaka, V	1999	274	14541	J Biol Chem	HCAPLUS
Leroy, A	1993	268	4798	J Biol Chem	HCAPLUS
Marsh, D	1990			CRC Handbook of Lipi	
Nichols, J	1988	27	3925	Biochemistry	HCAPLUS
Parsegian, V	1979	76	2750	Proc Natl Acad Sci U	HCAPLUS
Paternostre, M	1988	27	2668	Biochemistry	HCAPLUS
Small, D	1971	1	332	The Bile Acids	
Sreerama, N	2000	287	243	Anal Biochem	HCAPLUS
Von Bodman, B	1986	83	9443	Proc Natl Acad Sci U	
Wlodawer, A	1979	104	231	FEBS Lett	HCAPLUS

OS.CITING REF COUNT: 67 THERE ARE 67 CAPLUS RECORDS THAT CITE THIS RECORD (67 CITINGS)

L27 ANSWER 32 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:403805 HCAPLUS Full-text
DOCUMENT NUMBER: 136:391046
TITLE: Method for the preparation of microspheres which contain colloidal systems
INVENTOR(S): Hennink, Wilhelmus Everhardus; Franssen, Okke
PATENT ASSIGNEE(S): Octoplus B.V., Neth.
SOURCE: U.S., 30 pp., Cont.-in-part of U.S. Ser. No. 308,349.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 6395302	B1	20020528	US 2000-503847		20000215
			<--		
EP 842657	A1	19980520	EP 1996-203234		19961119
			<--		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI					
US 6303148	B1	20011016	US 1999-308349		19990519
			<--		
WO 2001060339	A2	20010823	WO 2001-NL125		20010215
			<--		
WO 2001060339	A3	20011206			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
EP 1255534	A2	20021113	EP 2001-908459		20010215
			<--		
EP 1255534	B1	20030730			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2003522781	T	20030729	JP 2001-559437		20010215
			<--		
AT 245971	T	20030815	AT 2001-908459		20010215
			<--		
ES 2204837	T3	20040501	ES 2001-908459		20010215
			<--		
PRIORITY APPLN. INFO.:			EP 1996-203234	A	19961119
			<--		
			US 1999-308349	A2	19990519
			<--		
			WO 1997-NL625	W	19971117
			<--		
			US 2000-503847	A	20000215
			<--		
			WO 2001-NL125	W	20010215
			<--		

AB The invention relates to a method for the preparation of microencapsulated colloidal systems such as liposomes, i.e., microspheres which comprise colloidal systems. These microencapsulated colloidal systems can be used as controlled release systems for the delivery of active ingredients in in vivo and in vitro applications. A method is provided in which the colloidal systems are added to a phase which comprises a water soluble crosslinkable polymer followed by formation of microspheres. To a 2 mL solution of methacrylate derivatized dextran in phosphate buffer was added 25.6 mg IgG and 1 U dextranase. This solution was emulsified in an aqueous solution of 24% PEG in 0.22 M KCl. Thereafter, 100 mL of 20% TEMED and 180 mL potassium peroxydisulfate 50 mg/mL in water were added. The microspheres thus obtained were washed with water and dried under a nitrogen flow. The release of IgG from dextran microspheres could be modulated by dextranase.

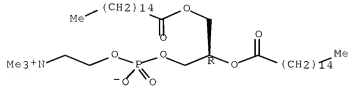
IT 63-89-8, Dipalmitoylphosphatidylcholine
(method for preparation of microspheres which contain colloidal systems)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt,

4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K0009-14
ICS A61K0009-16; A61K0009-00; B01J0013-02; A01N0025-26
INCL 424489000
CC 63-6 (Pharmaceuticals)
ST controlled release microsphere colloid methacrylate dextran IgG
IT Antibodies and Immunoglobulins
(IgG; method for preparation of microspheres which contain colloidal systems)
IT Drug delivery systems
(liposomes, controlled-release; method for preparation of microspheres which contain colloidal systems)
IT Colloids
Dissolution
Particle size
(method for preparation of microspheres which contain colloidal systems)
IT Lipids, biological studies
Polyoxyalkylenes, biological studies
Proteins
(method for preparation of microspheres which contain colloidal systems)
IT Drug delivery systems
(microspheres, controlled-release; method for preparation of microspheres which contain colloidal systems)
IT Drug delivery systems
(nanoparticles; method for preparation of microspheres which contain colloidal systems)
IT Solvents
(organic; method for preparation of microspheres which contain colloidal systems)
IT Polyoxyalkylenes, biological studies
(reaction products with dextran; method for preparation of microspheres which contain colloidal systems)
IT 79-41-4DP, Methacrylic acid, reaction products with dextran 868-77-9DP, reaction products with dextran 9004-34-6DP, Cellulose, reaction products with methacrylates 9004-54-0DP, Dextran, reaction products with methacrylates 9005-25-8DP, Starch, reaction products with methacrylates 25322-68-3DP, Polyethylene glycol, reaction products with dextran
(method for preparation of microspheres which contain colloidal systems)
IT 57-88-5, Cholesterol, biological studies 63-89-8, Dipalmitoylphosphatidylcholine 1461-15-0, Calcein 4537-77-3, Dipalmitoylphosphatidylglycerol 9002-89-5, Polyvinyl alcohol

9025-70-1, Dextranase 25189-55-3, Poly(N-isopropyl acrylamide) 25322-68-3, Polyethylene glycol
(method for preparation of microspheres which contain colloidal systems)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1986			EP 0213303 A2	HCAPLUS
Bradford, M	1976	72	248	Anal Biochem	HCAPLUS
de Smedt	1995	28	5082	Macromolecules	HCAPLUS
Ecanow	1990			US 4963367 A	HCAPLUS
Gehre	1995	22	145	Proceed Intern Symp	
Gehrke	1997			US 5674521 A	HCAPLUS
Heller	1983	4	262	Biomaterials	HCAPLUS
Hennink	1996	39	47	Journal of Controlle	HCAPLUS
Kim	1992	9	283	Pharmaceutical Resea	HCAPLUS
Sievers	1997			US 5639441 A	HCAPLUS
van Dijk-Wolthuis	1995	28	6317	Macromolecules	HCAPLUS
Wheatley	1990			US 4921757 A	HCAPLUS

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L27 ANSWER 33 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:336856 HCAPLUS Full-text

DOCUMENT NUMBER: 138:193024

TITLE: Polymeric nanospheres fabricated with natural emulsifiers for clinical administration of an anticancer drug paclitaxel (Taxol)

AUTHOR(S): Feng, Si-Shen; Li, Mu; Chen, Bing-Hung; Pack, Daniel

CORPORATE SOURCE: Department of Chemical and Environmental Engineering, National University of Singapore, Singapore, 119260, Singapore

SOURCE: Materials Science & Engineering, C: Biomimetic and Supramolecular Systems (2002), C20(1-2), 85-92
CODEN: MSCEEE; ISSN: 0928-4931

PUBLISHER: Elsevier Science B.V.

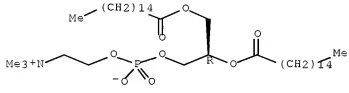
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Paclitaxel (Taxol) is one of the most effective anticancer drugs found from nature in recent decades, which can treat various cancers including ovarian, breast, brain, colon and lung cancer, and AIDS-related cancer. Due to its low aqueous solubility, adjuvants such as Cremophor EL, which causes serious side effects, have to be used in its administration. Our aim is to develop an alternative delivery system to achieve better therapeutic effects with min. side effects. Paclitaxel-loaded nanospheres of biodegradable polymers were prepared by an improved solvent extraction/evaporation technique. Phospholipids, cholesterol and vitamins were used to replace traditional chemical emulsifiers to achieve high encapsulation efficiency (EE) and desired release rate of the drug. Nanospheres prepared under various conditions are characterized by the light scattering for size and size distribution, the SEM and the atomic force microscopy (AFM) for surface morphol.; differential scanning calorimetry (DSC) for the phys. status of the drug within the polymeric matrix; the zeta-potential measurement for the surface charge properties; and XPS for the surface chemical In-vitro release kinetics were measured by high-performance liquid chromatog. (HPLC). Best design was pursued to develop a product for cancer chemotherapy.

IT 63-89-8, DPPC
(polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 63-6 (Pharmaceuticals)
ST paclitaxel glycolide lactide nanosphere anticancer
IT Polyesters, biological studies
(dilactone-based; polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
IT Castor oil
(ethoxylated; polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
IT Drug delivery systems
(nanospheres; polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
IT Antitumor agents
Dissolution
Emulsifying agents
Particle size distribution
Surface structure
Zeta potential
(polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
IT Gelatins, biological studies
(polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
IT 57-88-5, Cholesterol, biological studies 63-89-8, DPPC 9002-89-5, Polyvinyl alcohol
(polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
IT 26780-50-7, Poly(glycolide-co-lactide) 33069-62-4, Taxol
(polymeric paclitaxel nanospheres fabricated with natural emulsifiers)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				http://www.cnn.com/H	
Aprahamian, M	1987	61	69	Biol Cell	HCAPLUS
Deng, X	1999	58	123	J Controlled Release	HCAPLUS
Dorr, R	1994	28	S11	Ann Pharmacother	HCAPLUS
Evora, C	1998	51	143	J Controlled Release	HCAPLUS
Feng, S	2001	71	53	J Controlled Release	HCAPLUS

Fjallskog, M	1993	342	876	Lancet	
Florence, A	1997	14	259	Pharm Res	HCAPLUS
Garti, N	1999	152	125	Colloids Surf, A	HCAPLUS
Gorner, T	1999	57	259	J Controlled Release	HCAPLUS
Huizing, M	1995	13	381	Cancer Invest	HCAPLUS
Ichihara, T	1989	49	4357	Cancer Res	MEDLINE
Kongshaug, M	1991	23	473	Int J Biochem	HCAPLUS
Liggins, R	1997	86	1458	J Pharm Sci	HCAPLUS
Mankad, P	1992	6	77	Cardiovasc Drug Ther	MEDLINE
Mazzo, D	1997	54	566	Am J Health-Syst Pha	HCAPLUS
Oppenheim, R	1982	8	531	Drug Dev Ind Pharm	HCAPLUS
Scholes, P	1999	59	261	J Controlled Release	HCAPLUS
Suh, H	1998	42	331	J Biomed Mater Res	HCAPLUS
Tatou, E	1996	52	1	Pharmacology	HCAPLUS
Wang, J	1993	106	441	Chin Med J	MEDLINE
Wang, Y	1996	44	1935	Chem Pharm Bull	HCAPLUS
Webster, L	1993	85	1685	J Natl Cancer Inst	MEDLINE
Zhen, X	1995	124	149	Int J Pharm	

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L27 ANSWER 34 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:812103 HCAPLUS Full-text
DOCUMENT NUMBER: 136:98160
TITLE: Lipid membrane reorganization induced by chemical recognition
AUTHOR(S): Last, Julie A.; Waggoner, Tina A.; Sasaki, Darryl Y.
CORPORATE SOURCE: Biomolecular Materials and Interfaces Department, Sandia National Laboratories, Albuquerque, NM, 87185, USA
SOURCE: Biophysical Journal (2001), 81(5), 2737-2742
CODEN: BIOJAU; ISSN: 0006-3495
PUBLISHER: Biophysical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

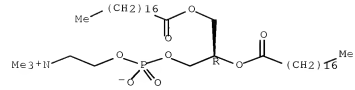
AB Nanoscale structural reorganization of a lipid bilayer membrane induced by a chemical recognition event has been imaged using in situ atomic force microscopy (AFM). Supported lipid bilayers, composed of distearylphosphatidylcholine (DSPC) and a synthetic lipid functionalized with a Cu2+ receptor, phase-sep. into nanoscale domains that are distinguishable by the 9 Å height difference between the two mols. Upon binding of Cu2+ the electrostatic nature of the receptor changes, causing a dispersion of the receptor mols. and subsequent shrinking of the structural features defined by the receptors in the membrane. Complete reversibility of the process was demonstrated through the removal of metal ions with EDTA.

IT 816-94-4, DSPC
(lipid membrane reorganization induced by chemical recognition)

RN 816-94-4 HCAPLUS

CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 6-6 (General Biochemistry)
IT 816-94-4, DSPC
(lipid membrane reorganization induced by chemical recognition)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alberts, B	1994			Molecular Biology of	
Ariga, K	1998	31	371	Acc Chem Res	HCAPLUS
Brian, A	1984	81	6159	Proc Natl Acad Sci	HCAPLUS
Brown, D	1998	14	111	Annu Rev Cell Dev Bi	HCAPLUS
Egawa, H	1999	15	1660	Langmuir	HCAPLUS
Grakoui, A	1999	285	221	Science	HCAPLUS
Hui, S	1995	68	171	Biophys J	HCAPLUS
Johnson, S	1991	59	289	Biophys J	HCAPLUS
Lipowsky, R	1991	202	17	Mol Cryst Liq Cryst	HCAPLUS
Lis, L	1982	37	657	Biophys J	HCAPLUS
Maloney, K	1996	3	185	Chem Biol	HCAPLUS
Maloney, K	1999	183	3	Coord Chem Rev	HCAPLUS
Ng, K	1995	11	4048	Langmuir	HCAPLUS
Reichert, A	1995	117	829	J Am Chem Soc	HCAPLUS
Reviakine, I	2000	16	1806	Langmuir	HCAPLUS
Rocheville, M	2000	288	154	Science	HCAPLUS
Sasaki, D	1995	34	905	Angew Chem Int Ed	HCAPLUS
Sasaki, D	1998		1581	Chem Comm	HCAPLUS
Sasaki, D	1999	3606	46	Proc SPIE-Int Soc Op	HCAPLUS
Shibata-Seki, T	1996	273	297	Thin Solid Films	HCAPLUS
Singh, A	1992	8	1570	Langmuir	HCAPLUS
Singh, S	1991	60	1401	Biophys J	HCAPLUS
Song, X	1998	120	11514	J Am Chem Soc	HCAPLUS
Weisenhorn, A	1990	4	511	Scanning Microsc	HCAPLUS
Yip, C	2000	78	466	Biophys J	HCAPLUS

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

L27 ANSWER 35 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:551707 HCAPLUS Full-text
DOCUMENT NUMBER: 135:118786
TITLE: Lipase stabilization with surfactant combination
INVENTOR(S): Hattori, Shizuo; Kawamura, Yoshihisa
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001204461	A	20010731	JP 2000-17155 <--	20000126
PRIORITY APPLN. INFO.:			JP 2000-17155 <--	20000126

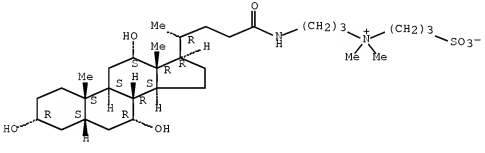
AB A method for stabilization of lipase by using a combination of N-methylglucamide surfactant, glucoside surfactant , Emulgen 430 (Polyoxyethylene), Brij98 (Polyoxyethylene (20) oleyl ether), Brij700 (Polyoxyethylene (100) stearyl ether), or CHAPS, is disclosed. MEGA-8 (octanoyl-N-methylglucamide), MEGA-9 (nanoyl-N-methylglucamide), MEGA-10 (decanoyl-N-methylglucamide) is preferably used as N-methylglucamide surfactant, and octyl-β-glucoside, octyl-β-thioglucoside as glucoside surfactant. Significant improvement in lipase stability was demonstrated by use of MEGA-8, Emulgen 430, Brij98, Brij700, and CHAPS.

IT 75621-03-3, CHAPS
(lipase stabilization with surfactant combination)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C12N0009-96
ICS C12Q0001-44

CC 7-8 (Enzymes)
Section cross-reference(s): 9

ST lipase stabilization surfactant Emulgen Brij98 Brij700; CHAPS MEGA8 MEGA9 MEGA10 lipase stabilization

IT Surfactants
(lipase stabilization with surfactant combination)

IT Glycosides
(use as surfactant; lipase stabilization with surfactant combination)

IT 9001-62-1, Lipase
(lipase stabilization with surfactant combination)

IT 9004-98-2, Emulgen 430 9005-00-9, Brij700 29836-26-8 75621-03-3, CHAPS 85261-19-4, MEGA-9 85261-20-7, MEGA-10 85316-98-9, MEGA-8 85618-21-9, Octyl-β-thioglucoside
(lipase stabilization with surfactant combination)

L27 ANSWER 36 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:525955 HCAPLUS Full-text
DOCUMENT NUMBER: 135:112008

TITLE: Amphiphilic and ionic polymer matrixes and derivatives thereof for use in pharmaceutical vesicles

INVENTOR(S): De Miguel, Ignacio; Imbertie, Laurent; Betbeder, Didier; Lescure, Francois; Kravtzoff, Roger

PATENT ASSIGNEE(S): Biovector Therapeutics SA, Fr.

SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001051090	A2	20010719	WO 2001-FR64 <--	20010110
WO 2001051090	A3	20020228		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2803526	A1	20010713	FR 2000-329 <--	20000112
FR 2803517	A1	20010713	FR 2000-15126 <--	20001123
PRIORITY APPLN. INFO.:			FR 2000-329 A <--	20000112
			FR 2000-15126 A <--	20001123

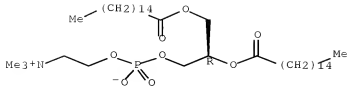
AB The invention relates to a novel type of amphiphilic and ionic polymer matrixes comprising a macromol. hydrophilic matrix bearing a pos. or neg. ionic charge, whereby a lipidic phase having a sign opposite to that of the matrix is incorporated therein. The invention also refers to a method for the production and use thereof. A suspension of amphiphilic submicron vesicles was prepared containing submicron particles 72, dipalmitoyl phosphatidyl choline 1.33, cetyl tri-Me ammonium bromide 0.53, and halofantrine 2 mg/mL. The % incorporation of halofantrine in the vesicles was 100%.

IT 63-89-8, Dipalmitoylphosphatidyl choline
(amphiphilic and ionic polymer matrixes and derivs. thereof for use in pharmaceutical vesicles)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K0047-36
ICS A61K0007-00; A61K0009-00; A23L0001-00; A61P0031-10; A61P0005-30
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 38
IT Surfactants
(anionic; amphiphilic and ionic polymer matrixes and derivs. thereof for use in pharmaceutical vesicles)
IT Surfactants
(cationic; amphiphilic and ionic polymer matrixes and derivs. thereof for use in pharmaceutical vesicles)
IT Drug delivery systems
(nanoparticles; amphiphilic and ionic polymer matrixes and derivs. thereof for use in pharmaceutical vesicles)
IT Surfactants
(nonionic; amphiphilic and ionic polymer matrixes and derivs. thereof for use in pharmaceutical vesicles)
IT 51-84-3, Choline acetate, biological studies 57-09-0, Cetyltrimethyl ammonium bromide 63-89-8, Dipalmitoylphosphatidyl choline 106-89-8, biological studies 107-43-7D, betaine, esters 302-79-4, Trans-Retinoic acid 541-15-1D, Carnitine, acyl derivs. 979-32-8, Estradiol valerate 1397-89-3, Amphotericin b 9037-22-3, Amylopectin 9050-36-6, Maltodextrin 10025-87-3, Phosphoric trichloride 13895-77-7, Glycidyl trimethyl ammonium bromide 14357-21-2, Dioctadecyl dimethyl ammonium 59865-13-3, Cyclosporin a 69756-53-2, Halofantrine 124050-77-7, DOGS 144189-73-1, DOTAP
(amphiphilic and ionic polymer matrixes and derivs. thereof for use in pharmaceutical vesicles)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				FR 2757768 A1	HCAPLUS
Anon				FR 2766706 A1	HCAPLUS
Anon				WO 9856334 A1	HCAPLUS

L27 ANSWER 37 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:142751 HCAPLUS Full-text
DOCUMENT NUMBER: 134:301283
TITLE: Nanoparticle arrays formed by spatial compartmentalization in a complex fluid
AUTHOR(S): Firestone, Millicent A.; Williams, Dixy E.; Seifert, Soenke; Csencsits, Roseann
CORPORATE SOURCE: Materials Science and Chemistry Divisions, Argonne National Laboratory, Argonne, IL, 60439, USA
SOURCE: Nano Letters (2001), 1(3), 129-135
CODEN: NALEFD; ISSN: 1530-6984
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

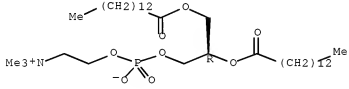
AB A mesoscopically ordered lamellar gel phase of a polymer-grafted, lipid-based complex fluid is used as a scaffolding to spatially organize inorg. nanoparticles. The complex fluid provides both a highly anisotropic environment and a segregated aqueous and organic domains in which inorg. nanoparticles can be selectively placed by tailoring their size and surface characteristics. Three types of Ag nanoparticles-underivatized, surfactant-stabilized, and dodecanthiol-derivatized-were evaluated. Comparison of the surface plasmon resonance of the various Ag particles dispersed in conventional solvents to those contained within the complex fluid was used to determine the region of spatial localization in the lamellar gel phase. Ag particles rendered hydrophobic by capping with an alkane thiol insert into the hydrocarbon bilayer region. Surfactant-stabilized and underivatized Ag nanoparticles reside in the aqueous channels, with the latter particles preferentially interacting with the grafted PEG chains/charged membrane interface region. Interparticle interaction between encapsulated hydrophilic Ag particles can be enhanced by increasing the number of PEG repeat units (i.e., the length of the lipid-appended polymer). Examination of the x-ray diffraction profiles indicates that the gel-phase structure of the complex fluid is preserved upon introduction of all 3 types of nanoparticles. Guinier anal. of the low-q SAXS data for the intercalated Ag yields particle sizes that are in good agreement with those determined by TEM prior to introduction, indicating that they remain as nonaggregated, discrete nanoparticles. These results not only demonstrate the use of complex fluids as a matrix in which to produce periodic arrays of encapsulated nanoparticle guests, but also suggest the possibility of employing them to modulate interactions between guests and, hence, their optical and electronic properties.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(Ag nanoparticle arrays formed by spatial compartmentalization in complex fluid containing)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 66-4 (Surface Chemistry and Colloids)
Section cross-reference(s): 29

ST silver nanoparticle self assembly polymer lipid complex fluid

IT Nanoparticles
Self-assembly
(Ag nanoparticle arrays formed by spatial compartmentalization in complex fluid)

IT Inclusion compounds
(Ag nanoparticle arrays formed by spatial compartmentalization in complex fluid)

IT Polyoxyalkylenes, properties
(reaction product with dimyristoylphosphatidylethanolamine; Ag

nanoparticle arrays formed by spatial compartmentalization in complex fluid containing)

IT 7440-22-4, Silver, properties 72925-50-9, Silver dodecyl sulfate 93917-83-0, 1-Dodecanethiol, silver salt
(Ag nanoparticle arrays formed by spatial compartmentalization in complex fluid)

IT 1643-20-5, N,N-Dimethyldodecylamine N-oxide 18194-24-6, Dimyristoylphosphatidylcholine 20255-95-2D, Dimyristoylphosphatidylethanolamine, reaction product with poly(ethylene glycol) 25322-68-3D, Poly(ethylene glycol), reaction product with dimyristoylphosphatidylethanolamine
(Ag nanoparticle arrays formed by spatial compartmentalization in complex fluid containing)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aliev, F	1999	11	1006	Adv Mater	HCAPLUS
Auer, F	2000	16	7554	Langmuir	HCAPLUS
Brust, M	1994		801	J Chem Soc Chem Comm	HCAPLUS
Connolly, S	2000	104	4765	J Phys Chem B	HCAPLUS
Creighton, J	1991	87	3881	J Chem Soc, Faraday	HCAPLUS
Farbman, I	1992	96	8469	J Phys Chem	HCAPLUS
Fendler, J	1995	7	607	Adv Mater	HCAPLUS
Firestone, M	2000	104	2433	J Phys Chem B	HCAPLUS
Firestone, M	1998	14	4688	Langmuir	HCAPLUS
Guinier, A	1955			Small Angle Scatteri	
Guinier, A	1994			X-ray Diffraction in	
Heath, J	1997	101	189	J Phys Chem B	HCAPLUS
Henglein, A	1995	99	903	Ber Bunsen-Ges Phys	HCAPLUS
Henglein, A	1998	102	8364	J Phys Chem B	HCAPLUS
Kang, S	1998	14	226	Langmuir	HCAPLUS
Korgel, B	1998	102	8379	J Phys Chem B	HCAPLUS
Li, H	2000	212	222	J Crystal Growth	HCAPLUS
Linnert, T	1993	97	679	J Phys Chem	HCAPLUS
Loweth, C	1999	38	1808	Angew Chem, Int Ed E	HCAPLUS
Mafune, F	2000	104	8333	J Phys Chem B	HCAPLUS
Mann, S	2000	12	147	Adv Mater	HCAPLUS
Manoz, R	2000	12	725	Adv Mater	
Martin, J	2000	104	9475	J Phys Chem B	HCAPLUS
Murray, C	1995	270	1335	Science	HCAPLUS
Musick, M	2000	12	2869	Chem Mater	HCAPLUS
Rajh, T	1999	103	2172	J Phys Chem B	HCAPLUS
Sarathy, K	1999	103	399	J Phys Chem B	HCAPLUS
Storhoff, J	2000	122	4640	J Am Chem Soc	HCAPLUS
Svergun, D	2000	104	5242	J Phys Chem B	HCAPLUS
Ung, T	1998	14	3740	Langmuir	HCAPLUS
Vuvkovic, V	1993	9	980	Langmuir	
Wang, W	1999	103	5613	J Phys Chem B	HCAPLUS

OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)

L27 ANSWER 38 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:14318 HCAPLUS Full-text
DOCUMENT NUMBER: 134:121310
TITLE: Single lipid diffusion in Langmuir monolayers
AUTHOR(S): Forstner, Martin B.; Kaes, Josef; Martin, Douglas
CORPORATE SOURCE: Center for Nonlinear Dynamics Department of Physics, University of Texas at Austin, Austin, TX, 78705, USA

SOURCE: Langmuir (2001), 17(3), 567-570
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

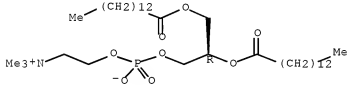
AB Individual lipid movement in a monolayer is studied over long time intervals (500 s) by dark-field microscopy of single lipids labeled with Au colloids (30 or 100 nm in diameter). Dimyristoyl phosphatidylcholine in the fluid phase shows normal diffusion, with a diffusion coefficient of 1.1 + 10-8 cm2/s. Since this is consistent with values derived from the diffusive transport of many lipids, the anal. of Au-tagged lipids in a monolayer provides a reliable picture of lipid diffusion on the level of single mols.

IT 18194-24-6, Dimyristoyl phosphatidylcholine
(measurement of single lipid diffusion in Langmuir monolayers by dark-field microscopy using gold nanoparticles)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 66-1 (Surface Chemistry and Colloids)

ST lipid diffusion Langmuir monolayer gold nanoparticle darkfield microscopy

IT Microscopy
(dark-field; measurement of single lipid diffusion in Langmuir monolayers by dark-field microscopy using gold nanoparticles)

IT Diffusion
Langmuir monolayers
Nanoparticles
(measurement of single lipid diffusion in Langmuir monolayers by dark-field microscopy using gold nanoparticles)

IT Lipids, properties
(measurement of single lipid diffusion in Langmuir monolayers by dark-field microscopy using gold nanoparticles)

IT 7440-57-5, Gold, uses
(measurement of single lipid diffusion in Langmuir monolayers by dark-field microscopy using gold nanoparticles)

IT 18194-24-6, Dimyristoyl phosphatidylcholine
(measurement of single lipid diffusion in Langmuir monolayers by dark-field microscopy using gold nanoparticles)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alecio, M	1982	7	5171	Proc Natl Acad Sci U	
Axelrod, D	1983	75	1	J Membr Biol	HCAPLUS

Blume, A	1993		455	Phospholipid Handboo	HCAPLUS
Crocker, J	1996	179	298	J Colloid Interface	HCAPLUS
de Brabander, M	1985	43	273	Cytobios	MEDLINE
Egger, M	1990	57	669	Biophys J	HCAPLUS
Faulk, W	1971	8	1081	Immunochemistry	HCAPLUS
Galla, H	1979	48	215	J Membr Biol	HCAPLUS
Gaub, H	1984	45	725	Biophys J	HCAPLUS
Gross, D	1988		19	Spectroscopic Membra	MEDLINE
Groves, J	1995	69	1972	Biophys J	HCAPLUS
Jacobson, K	1987	49	163	Annu Rev Physiol	HCAPLUS
Jacobson, K	1995	268	1441	Science	HCAPLUS
Janmey, P	1989	264	4825	J Biol Chem	HCAPLUS
Kusumi, A	1993	65	2021	Biophys J	HCAPLUS
Lee, G	1991	88	6274	Proc Natl Acad Sci U	HCAPLUS
Mingotaud, A	1993			Handbook of Monolaye	
Mohwald, H	1993		579	Phospholipid Handboo	HCAPLUS
Pershan, P	1979	40	423	J Phys (Paris)	
Rubenstein, J	1979	76	15	Proc Natl Acad Sci U	HCAPLUS
Saffman, P	1975	72	3111	Proc Natl Acad Sci U	MEDLINE
Saxton, M	1997	26	373	Annu Rev Biophys Bio	HCAPLUS
Sheets, E	1997	36	12449	Biochemistry	HCAPLUS
Sheetz, M	1993		285	Optical Microscopy:E	HCAPLUS
Tamada, K	1993	9	1545	Langmuir	HCAPLUS

OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)

L27 ANSWER 39 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:351350 HCAPLUS Full-text
DOCUMENT NUMBER: 133:9106
TITLE: Nanocapsules and method for their production
INVENTOR(S): Panzner, Steffen
PATENT ASSIGNEE(S): Novosom G.m.b.H., Germany
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028972	A2	20000525	WO 1999-EP9744 <--	19991115
WO 2000028972	A3	20001221		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19852928	C1	20000803	DE 1998-19852928 <--	19981117
CA 2351711	A1	20000525	CA 1999-2351711 <--	19991115
BR 9916741	A	20010821	BR 1999-16741 <--	19991115

EP 1131053	A2	20010912	EP 1999-966943 <--		19991115
EP 1131053	B1	20060927			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY					
HU 2001004422	A2	20020328	HU 2001-4422 <--		19991115
HU 2001004422	A3	20021228			
NZ 512278	A	20030530	NZ 1999-512278 <--		19991115
JP 2003517998	T	20030603	JP 2000-582020 <--		19991115
AU 769497	B2	20040129	AU 2000-22822 <--		19991115
AT 340559	T	20061015	AT 1999-966943 <--		19991115
NO 2001002404	A	20010516	NO 2001-2404 <--		20010516
US 6713533	B1	20040330	US 2001-831975 <--		20010516
PRIORITY APPLN. INFO.:			DE 1998-19852928 <--	A	19981117
			WO 1999-EP9744 <--	W	19991115

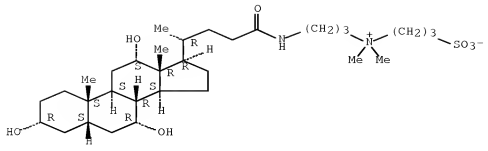
AB Nanocapsules for pharmaceutical and diagnostic use, 50 nm-10 μm in diameter, are provided whose envelope layer consists of ≥2 different, cross-linked polymers P1 and P2. Optionally, a lipid layer may be present underneath the envelope layer. The nanocapsules are produced by covalently crosslinking ≥2 different water-soluble polymers P1 and P2 on the surface of liposomes. Optionally, the liposomes may be dissolved once the polymers are crosslinked. Thus, a liposome matrix was prepared by dialysis of an aqueous mixture of phosphatidylcholine 47.5, phosphatidylserine 2.5, and Na deoxycholate 50 mol% against 150 mM aqueous NaCl. The liposomes were coated with bovine serum albumin by incubating liposomes 4, serum albumin 10, 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC) 10 mg/mL, and MES 50 mM (pH 5.1) for ≥1 h at 37°, ending the reaction by addition of KOAc to 200 mM. The coated liposomes were then incubated with Na alginate (200 μg/mL) in 50 mM MES (pH 5.1) and crosslinked with EDC (10 mg/mL) for 2 h at 37°, and the liposomes were dissolved out of the nanocapsules with 1% CHAPS.

IT 75621-03-3, CHAPS
(lipids removal from nanocapsules with; nanocapsules and method for their production)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K0009-127
ICS A61K0009-50
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 9
ST nanocapsule crosslinked polymer liposome; albumin alginate nanocapsule liposome
IT Polymers, biological studies
(carboxy-containing, crosslinked; nanocapsules and method for their production)
IT Polymers, biological studies
(crosslinked; nanocapsules and method for their production)
IT Polymers, biological studies
(hydroxy-containing, crosslinked; nanocapsules and method for their production)
IT Detergents
(lipids removal from nanocapsules with; nanocapsules and method for their production)
IT Phosphatidylcholines, biological studies
Phosphatidylserines
(liposomes containing; nanocapsules and method for their production)
IT Polyoxyalkylenes, reactions
(maleimido-modified; nanocapsules and method for their production)
IT Capsules
(nano-; nanocapsules and method for their production)
IT Diagnosis
Liposomes
(nanocapsules and method for their production)
IT Carbohydrates, biological studies
Hemoglobins
Proteins, general, biological studies
(nanocapsules and method for their production)
IT Lipids, biological studies
(nanocapsules containing; nanocapsules and method for their production)
IT Hormones, animal, biological studies
Peptides, biological studies
(nanocapsules surface-modified with; nanocapsules and method for their production)
IT Polyoxyalkylenes, biological studies
(nanocapsules surface-modified with; nanocapsules and method for their production)
IT Drug delivery systems

(nanocapsules; nanocapsules and method for their production)
IT Chelating agents
(polymers; nanocapsules and method for their production)
IT Glycoproteins, specific or class
(secretory, binding to Con A-alginate nanocapsules; nanocapsules and method for their production)
IT Albumins, biological studies
(serum; nanocapsules and method for their production)
IT 11028-71-0, Concanavalin A
(crosslinked; nanocapsules and method for their production)
IT 9005-38-3, Sodium alginate
(crosslinked; nanocapsules and method for their production)
IT 361-09-1, Sodium cholate 75621-03-3, CHAPS
(lipids removal from nanocapsules with; nanocapsules and method for their production)
IT 57-09-0, Cetyltrimethylammonium bromide 2885-00-9, Octadecyl mercaptan
(liposomes containing; nanocapsules and method for their production)
IT 1461-15-0, Calcein
(nanocapsules and method for their production)
IT 25322-68-3D, PEG, maleimido-modified
(nanocapsules and method for their production)
IT 9003-05-8D, Polyacrylamide, thiol-substituted 9012-76-4, Chitosan
(nanocapsules and method for their production)
IT 9003-99-0, Peroxidase
(nanocapsules containing; nanocapsules and method for their production)
IT 25322-68-3, PEG
(nanocapsules surface-modified with; nanocapsules and method for their production)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon				EP 0199362 A2	HCAPLUS
Anon				US 5834556 A	HCAPLUS

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

L27 ANSWER 40 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:337147 HCAPLUS Full-text
DOCUMENT NUMBER: 133:125176
TITLE: Poly(D,L-lactide) nanocapsules prepared by a solvent displacement process: influence of the composition on physicochemical and structural properties
AUTHOR(S): Mosqueira, Vanessa Carla Furtado; Legrand, Philippe; Pinto-Alphandary, Huguette; Puisieux, Francis; Barratt, Gillian
CORPORATE SOURCE: Departamento de Farmacia-Escola de Farmacia, Universidade Federal de Ouro Preto, Minas Gerais, 35400000, Brazil
SOURCE: Journal of Pharmaceutical Sciences (2000), 89(5), 614-626
CODEN: JPMSAE; ISSN: 0022-3549
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

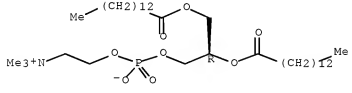
AB Nanocapsules (NC) were prepared by interfacial deposition of preformed biodegradable polymer (PLA50) after a solvent displacement process. The influence of the composition used for the preparation of NC was evaluated in terms of particle size, polydispersity, zeta potential, homogeneity, and structural characteristics of the systems. The nature of the oil phase, polymer mol. weight, type and concentration of different surfactants were investigated to optimize the formulation to obtain NC suitable for i.v. administration. The influence of the physicochem. properties of the different oils used in NC preparation on the NC size was evaluated. The interfacial tension between the oil and water phases seems to have a greater effect on NC size than the oil viscosity. Miglyol 810 and Et oleate lead to the formation of smaller NC, probably because of the reduced interfacial tension. The polymer mol. weight plays only a small role in NC surface charge in the presence of lecithin, whereas NC surface charge, size, polydispersity, and short-term stability were highly influenced by lecithin purity. It appears that the absence of Poloxamer 188 leads to smaller polydispersity, less contamination with nanospheres , and reduced formation of structures other than NC. Furthermore, electron microscopy and d. gradient d. techniques were used to examine the structure of the particles formed and their homogeneity. NC formation was evidenced by the bands with intermediate d. between nanoemulsion and nanospheres; however, other bands of low intensity were observed The presence of liposomes and multilayers in NC preparation was confirmed by electron microscopy. The percentage of carboxyfluorescein entrapped in different NC formulations allowed us to estimate the contamination by liposomes. It has been show that, under our exptl. conditions, an excess of lecithin is an essential prerequisite for a stable preparation of PLA NC.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(polylactide nanocapsules prepared by solvent displacement process)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 38

ST polylactide nanocapsule solvent displacement process surfactant

IT Glycerides, biological studies
(C8-10; polylactide nanocapsules prepared by solvent displacement process)

IT Drug delivery systems
(nanocapsules; polylactide nanocapsules prepared by solvent displacement process)

IT Interfacial tension
Particle size

Polydispersity
Surfactants
Zeta potential
(polylactide nanocapsules prepared by solvent displacement process)
IT Lecithins
Paraffin oils
Soybean oil
(polylactide nanocapsules prepared by solvent displacement process)
IT Lecithins
(soya; polylactide nanocapsules prepared by solvent displacement process)
IT 111-62-6, Ethyl oleate 112-40-3, Dodecane 1338-43-8, Span 80 18194-24-6, Dimyristoylphosphatidylcholine 18656-38-7, Dimyristoylphosphatidylcholine 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26680-10-4, Poly(D,L-lactide) 77466-09-2, Miglyol 840 97708-73-1, Miglyol 829 106392-12-5, Poloxamer 188 135945-29-8, Phospholipon 90
(polylactide nanocapsules prepared by solvent displacement process)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Calvo, P	1996	85	530	J Pharm Sci	HCAPLUS
Fessi, H	1989	55	R1	J Pharm	HCAPLUS
Stainmesse, S	1990			PhD Thesis, Univ Par	
Yu, W	1993	89	139	Int J Pharm	HCAPLUS

OS.CITING REF COUNT: 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (37 CITINGS)

L27 ANSWER 41 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:87740 HCAPLUS Full-text
DOCUMENT NUMBER: 132:251505
TITLE: A topology map for novel vesicle-polymer hybrid architectures
AUTHOR(S): Jung, Martin; Hubert, Dominique H. W.; Bomans, Paul H. H.; Frederik, Peter; Van Herk, Alex M.; German, Anton L.
CORPORATE SOURCE: Laboratory Polymer Chemistry Coatings Technology, Eindhoven Univ. Technology, Eindhoven, 5600 MB, Neth.
SOURCE: Advanced Materials (Weinheim, Germany) (2000), 12(3), 210-213
CODEN: ADVMEW; ISSN: 0935-9648
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The concept of templating polymerization in vesicles was studied. To investigate the relationship between a surfactant/polymer combination, the reaction conditions, and the final vesicle-polymer morphol., the photopolymn. of 3 monomers (styrene, Bu methacrylate, and Bu acrylate) with different crosslinkers (ethylene glycol dimethacrylate, [3-(methacryloylamino)propyl]trimethylammonium chloride, and divinylbenzene) in dioctadecyldimethylammonium bromide and dimyristoylphosphatidylcholine vesicles was examined The vesicle-polymer products were analyzed by cryo-transmission electron microscopy. The nanoscopic phase separation between surfactant matrix and polymer generally occurred for all common surfactant/polymer combinations. The individual morphol. depends on the

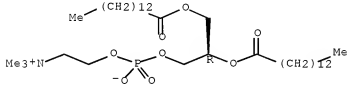
specific interplay between vesicle-matrix and polymer. Constructive guidelines for the synthesis of novel vesicle-polymer hybrid architectures are presented.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(templating photopolymn.of styrene and acrylates in vesicles and vesicle-polymer hybrid morphol.)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36

IT Polymer morphology
Surfactants
Vesicles (colloidal)
(templating photopolymn.of styrene and acrylates in vesicles and vesicle-polymer hybrid morphol.)

IT 3700-67-2, Dioctadecyldimethylammonium bromide 18194-24-6, Dimyristoylphosphatidylcholine
(templating photopolymn.of styrene and acrylates in vesicles and vesicle-polymer hybrid morphol.)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1993			Phospholipids Handbo	
Antonietti, M	1997	36	991	Angew Chem Int Ed En	
Frederik, P	1991	161	253	J Microsc	MEDLINE
Gilbert, R	1995			Emulsion Polymerizat	
Hotz, J	1998	10	1387	Adv Mater	HCAPLUS
Hotz, J	1998	14	1031	Langmuir	HCAPLUS
Hubert, D	1999			PhD Thesis, Eindhove	
Hubert, D				to be published in L	
Jung, M	1997	13	6877	Langmuir	HCAPLUS
Jung, M				to be published in L	
Jung, M				to be published in M	
Kurja, J	1993	34	2045	Polymer	HCAPLUS
Laughlin, R	1992	96	374	J Phys Chem	HCAPLUS
Meier, W	1999	4	6	Curr Opin Colloid In	HCAPLUS
Morgan, J	1997	13	6447	Langmuir	HCAPLUS
Murtagh, J	1986	81	127	Faraday Discuss Chem	HCAPLUS
Poulain, N	1996	34	729	Polym Sci Polym Chem	HCAPLUS
Sackmann, E	1995			Structure and Dynami	
van Herk, A	1997	C37	633	JMS--Rev Macromol Ch	HCAPLUS

OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)

L27 ANSWER 42 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

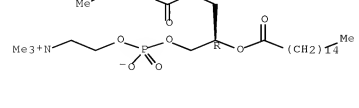
ACCESSION NUMBER: 1999:705711 HCAPLUS Full-text
DOCUMENT NUMBER: 132:46477
TITLE: Interaction of pulmonary surfactant protein A with phospholipid liposomes: a kinetic study on head group and fatty acid specificity
AUTHOR(S): Meyboom, A.; Maretzki, D.; Stevens, P. A.; Hofmann, K. P.
CORPORATE SOURCE: Ziegelstr. 5-9, Universitatsklinikum Charite, Institut fur Medizinische Physik und Biophysik, Humboldt-Universitat, Berlin, D-10098, Germany
SOURCE: Biochimica et Biophysica Acta, Molecular and Cell Biology of Lipids (1999), 1441(1), 23-35
CODEN: BBMLFG; ISSN: 1388-1981
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Recent work on surfactant protein A (SP-A) has shown that Ca2+ induces an active conformation, SP-A', which binds rapidly to liposomes and mediates their aggregation. Employing sensitive real time assays, the authors have now studied the lipid binding characteristics of the SP-A' liposome interaction. From the final equilibrium level of the resonant mirror binding signal, an apparent dissociation constant of Kd = 5 μM is obtained for the complex between SP-A and dipalmitoylphosphatidylcholine (DPPC) liposomes. At nanomolar SP-A concns., this complex is formed with a subsecond (0.3 s) reaction time, as measured by light-scattering signals evoked by photolysis of caged Ca2+. With palmitoyloleoylphosphatidylcholine (POPC), the complex formation proceeds at half the rate, compared to DPPC, leading to a lower final equilibrium level of SP-A lipid interaction. Distearoylphosphatidylcholine (DSPC) shows a stronger interaction than DPPC. Regarding the phospholipid headgroups, phosphatidylinositol (PI) and sphingomyelin (SM) interact comparable to DPPC, while less interaction is seen with phosphatidylethanolamine (PE) or with phosphatidylglycerol (PG). Thus both headgroup and fatty acid composition determine SP-A phospholipid interaction. However, the protein does not exhibit high specificity for either the polar or the apolar moiety of phospholipids.

IT 63-89-8, Dipalmitoylphosphatidylcholine 816-94-4, Distearoylphosphatidylcholine
(liposomes; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)

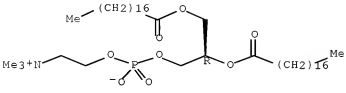
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 816-94-4 HCAPLUS
CN 3,5,9-Trioxa-4-phosphaheptacosan-1-aminium,
4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxooctadecyl)oxy]-, inner salt,
4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 6-3 (General Biochemistry)
ST pulmonary surfactant protein A phospholipid interaction;
phospholipid structure interaction surfactant protein SPA
IT Surfactant proteins (pulmonary)
(SP-A, calcium-activated; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Molecular association
(head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Phosphatidylcholines, biological studies
Phosphatidylethanolamines, biological studies
Phosphatidylglycerols
Phosphatidylinositols
Sphingomyelins
(liposomes; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Liposomes
(multilamellar; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Equilibrium constant
(of Ca·SP-A·phospholipid complex formation; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Reaction kinetics
(of Ca·SP-A·phospholipid complexes; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Fatty acids, biological studies
(of phospholipids; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT Structure-activity relationship
(phospholipid-binding; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT 7440-70-2, Calcium, biological studies
(calcium-activated SP-A; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)

IT 57-88-5, Cholesterol, biological studies 59-02-9, α-Tocopherol
(effects on Ca·SP-A·phospholipid complex formation;
head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)
IT 63-89-8, Dipalmitoylphosphatidylcholine 816-94-4
, Distearoylphosphatidylcholine 4235-95-4 18194-25-7,
Dilauroylphosphatidylcholine 19420-56-5 26853-31-6,
Palmitoyloleoylphosphatidylcholine
(liposomes; head group and fatty acid specificity in interaction of pulmonary surfactant protein A with phospholipid liposomes)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Casals, C	1993	296	585	Biochem J	HCAPLUS
Clements, J	1977	115	67	Am Rev Respir Dis	MEDLINE
Creuwels, L	1997	175	1	Lung	HCAPLUS
Efrati, H	1987	26	7986	Biochemistry	HCAPLUS
Ellis Davies, G	1994	91	187	Proc Natl Acad Sci	HCAPLUS
Hawgood, S	1985	24	184	Biochemistry	HCAPLUS
Hawgood, S	1987	84	66	Proc Natl Acad Sci	HCAPLUS
Hawgood, S	1992		33	Pulmonary Surfactant	
Heyse, S	1998	37	507	Biochemistry	HCAPLUS
Ikegami, M	1997	272	L479	Am J Physiol	HCAPLUS
Johansson, J	1994	7	372	Eur Respir J	HCAPLUS
King, R	1983	258	10672	J Biol Chem	HCAPLUS
Korfhagen, T	1996	93	9594	Proc Natl Acad Sci	HCAPLUS
Kuroki, Y	1991	266	3068	J Biol Chem	HCAPLUS
Kuroki, Y	1994	269	25943	J Biol Chem	HCAPLUS
Kuroki, Y	1988	85	5566	Proc Natl Acad Sci	HCAPLUS
MacDonald, R	1991	1061	297	Biochim Biophys Acta	MEDLINE
McCray, J	1992	31	8856	Biochemistry	HCAPLUS
Meyboom, A	1997	272	14600	J Biol Chem	HCAPLUS
Schleicher, A	1987	95	271	J Membr Biol	HCAPLUS
Schurch, S	1992	263	L210	Am J Physiol	HCAPLUS
Stewart, J	1980	104	10	Anal Biochem	HCAPLUS
Suzuki, Y	1989	140	75	Am Rev Respir Dis	HCAPLUS
Williams, M	1991	5	41	Am J Respir Cell Mol	HCAPLUS
Wright, J	1991	53	395	Annu Rev Physiol	HCAPLUS
Wright, J	1987	262	2888	J Biol Chem	HCAPLUS
Yu, S	1996	37	1278	J Lipid Res	HCAPLUS

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L27 ANSWER 43 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:639562 HCAPLUS Full-text

DOCUMENT NUMBER: 131:333767

TITLE: Nanometer scale organization of mixed surfactin/phosphatidylcholine monolayers

AUTHOR(S): Deleu, Magali; Paquot, Michel; Jacques, Philippe; Thonart, Philippe; Adriaensen, Yasmine; Dufrene, Yves F.

CORPORATE SOURCE: Unite de Chimie Biologique Industrielle Faculte Universitaire des Sciences Agronomiques de Gembloux, Gembloux, B-5030, Germany

SOURCE: Biophysical Journal (1999), 77(4), 2304-2310
CODEN: BIOJAU; ISSN: 0006-3495

PUBLISHER: Biophysical Society

DOCUMENT TYPE: Journal
LANGUAGE: English

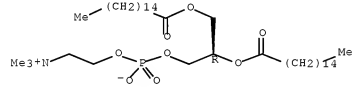
AB Mixed monolayers of the surface-active lipopeptide surfactin -C15 and of dipalmitoyl phosphatidylcholine (DPPC) were deposited on mica and their nanometer scale organization was investigated using atomic force microscopy (AFM) and XPS (XPS). AFM topog. images revealed phase separation for mixed monolayers prepared at 0.1, 0.25, and 0.5 surfactin molar ratios. This was in agreement with the monolayer properties at the air-water interface indicating a tendency of the two compds. to form bidimensional domains in the mixed systems. The step height measured between the surfactin and the DPPC domains was 1.2±0.1 nm, pointing to a difference in mol. orientation: while DPPC had a vertical orientation, the large peptide ring of surfactin was lying on the mica surface. The N/C atom concentration ratios obtained by XPS for pure monolayers were compatible with two distinct geometric models: a random layer for surfactin and for DPPC, a layer of vertically-oriented mols. in which the polar headgroups are in contact with mica. XPS data for mixed systems were accounted for by a combination of the two pure monolayers, considering resp. surface coverages that were in excellent agreement with those measured by AFM. These results illustrate the complementarity of AFM and XPS to directly probe the mol. organization of multicomponent monolayers.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(nanometer scale organization of mixed surfactin /phosphatidylcholine monolayers)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 6-6 (General Biochemistry)

ST surfactin dipalmitoylphosphatidylcholine membrane monolayer mol orientation

IT Membrane, biological
(monolayer; nanometer scale organization of mixed surfactin/phosphatidylcholine monolayers)

IT Molecular orientation
(nanometer scale organization of mixed surfactin /phosphatidylcholine monolayers)

IT 63-89-8, Dipalmitoylphosphatidylcholine 24730-31-2, Surfactin
(nanometer scale organization of mixed surfactin /phosphatidylcholine monolayers)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Andrade, J	1985		105	Surface and Interfac	
Bernheimer, A	1970	61	361	J Gen Microbiol	HCAPLUS

Dufrene, Y	1997	13	4779	Langmuir	HCAPLUS
Egger, M	1990	103	89	J Struct Biol	HCAPLUS
Gaines, G	1996		281	Insoluble Monolayers	
Gallet, X	1999	15	2409	Langmuir	HCAPLUS
Gerin, P	1995	92	1043	J Chim Phys	HCAPLUS
Hui, S	1995	68	171	Biophys J	HCAPLUS
Kakinuma, A	1969	33	1669	Agric Biol Chem	HCAPLUS
Maget-Dana, R	1989	981	309	Biochim Biophys Acta	HCAPLUS
Maget-Dana, R	1995	68	1937	Biophys J	HCAPLUS
Maget-Dana, R	1992	153	285	J Colloid Interface	HCAPLUS
Maget-Dana, R	1992	210/2	730	Thin Solid Films	
Marra, J	1985	24	4608	Biochemistry	HCAPLUS
Marra, J	1985	107	446	J Colloid Interface	HCAPLUS
Moore, S	1951	192	663	J Biol Chem	HCAPLUS
Mou, J	1995	248	507	J Mol Biol	HCAPLUS
Ratner, B	1986		107	Spectroscopy in the	
Razafindralambo, H	1998	46	911	J Agric Food Chem	HCAPLUS
Razafindralambo, H	1997	13	6026	Langmuir	HCAPLUS
Scofield, J	1976	8	129	J Electron Spectrosc	HCAPLUS
Sheppard, J	1991	1064	13	Biochim Biophys Acta	HCAPLUS
Solleti, J	1996	12	5379	Langmuir	
Thimon, L	1993	1	57	Colloids Surfaces B:	HCAPLUS
Vollenbroich, D	1997	63	44	Appl Env Microbiol	HCAPLUS
Vollenbroich, D	1997	25	289	Biologicals	HCAPLUS
Weisenhorn, A	1990	58	1251	Biophys J	HCAPLUS
Zasadzinski, J	1991	59	755	Biophys J	HCAPLUS

OS.CITING REF COUNT: 38 THERE ARE 38 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)

L27 ANSWER 44 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:406659 HCAPLUS Full-text

DOCUMENT NUMBER: 131:225209

TITLE: Near-field scanning optical microscopy studies of L-α-dipalmitoylphosphatidylcholine monolayers at the air-liquid interface

AUTHOR(S): Shiku, H.; Dunn, R. C.

CORPORATE SOURCE: Department of Chemistry, University of Kansas, Lawrence, KS, 60045, USA

SOURCE: Journal of Microscopy (Oxford) (1999), 194(2/3), 461-466
CODEN: JMICAR; ISSN: 0022-2720

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

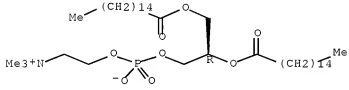
LANGUAGE: English

AB The phase structure in L-α-dipalmitoylphosphatidylcholine-2.0 mol% fluorescent 1,1'-dioctadecyl-3,3,3',3'-tetramethyl- indocarbocyanine perchlorate Langmuir monolayers dispersed on a 2M sucrose solution subphase is studied with near-field scanning optical microscopy (NSOM). Cantilevered NSOM probes operating in a tapping-mode feedback or an optical interferometric feedback mode are capable of tracking the air-sucrose solution interface. At the micrometer scale, the NSOM fluorescence images reveal lipid domain features similar to those observed previously in supported Langmuir-Blodgett (LB) monolayers. At the submicrometer scale, the small nanometric lipid islands seen in LB films are not observed at the air-sucrose interface. This supports a mechanism in which domain formation in LB films can be induced by means of the transfer process onto the solid support. Progress towards extending these studies to films at the air-water interface using the optical interferometric feedback method is also discussed.

IT 63-89-8, L-α-Dipalmitoylphosphatidylcholine

(near-field scanning optical microscopy studies of
L-α-dipalmitoylphosphatidylcholine monolayers at air-liquid
interface)
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium,
4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt,
4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 6-6 (General Biochemistry)
IT 63-89-8, L-α-Dipalmitoylphosphatidylcholine
(near-field scanning optical microscopy studies of
L-α-dipalmitoylphosphatidylcholine monolayers at air-liquid
interface)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Ahlers, M	1990	29	1269	Angew Chem Int Ed	
Bottomley, L	1998	70	245R	Anal Chem	
Bruckner-Lea, C	1993	9	3612	Langmuir	HCAPLUS
Cline, J	1995	34	4869	Appl Opt	
Courjon, D	1990	29	3734	Appl Opt	
Durkan, C	1997	83	1171	J Appl Phys	
Eng, L	1996	14	1386	J Vac Sci Technol B	HCAPLUS
Fang, J	1995	99	10425	J Phys Chem	HCAPLUS
Fischer, U	1988	52	249	Appl Phys Lett	
Guttroff, G	1996	68	3620	Appl Phys Lett	HCAPLUS
Hollars, C	1998	75	342	Biophys J	HCAPLUS
Hollars, C	1997	101	6313	J Phys Chem	HCAPLUS
Hu, J	1996	14	1341	J Vac Sci Technol B	HCAPLUS
Knobler, C	1990	249	870	Science	HCAPLUS
Kramer, A	1995	62	191	Ultramicroscopy	
Kramer, A	1998	71	123	Ultramicroscopy	HCAPLUS
Lieberman, K	1994	65	648	Appl Phys Lett	
McConnell, H	1991	42	171	Annu Rev Phys Chem	HCAPLUS
McConnell, H	1984	81	3249	Proc Natl Acad Sci	
Mikrut, J	1993	48	14479	Phys Rev B	HCAPLUS
Mohwald, H	1990	41	441	Annu Rev Phys Chem	MEDLINE
Muramatsu, H	1995	66	3245	Appl Phys Lett	HCAPLUS
Pompe, T	1998	14	2585	Langmuir	HCAPLUS
Rodriguez-Pantiano, J	1993	157	343	J Coll Interface Sci	
Seaver, M	1995	57	219	Ultramicroscopy	HCAPLUS
Sikes, H	1997	13	4704	Langmuir	HCAPLUS
Spratte, K	1994	10	3161	Langmuir	HCAPLUS
Talley, C	1996	69	3809	Appl Phys Lett	HCAPLUS
Tipler, P	1991			Physics For Scientis	

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS

RECORD (7 CITINGS)

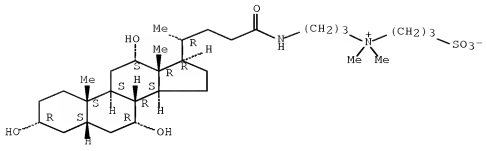
L27 ANSWER 45 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:127894 HCAPLUS Full-text
DOCUMENT NUMBER: 130:322576
TITLE: Precipitation of Dilute Chromatographic Samples (ng/ml) Containing Interfering Substances for SDS-PAGE
AUTHOR(S): Aguilar, Roberto M.; Bustamante, Juan J.; Hernandez, Peter G.; Martinez, Andrew O.; Haro, Luis S.
CORPORATE SOURCE: Division of Life Sciences, The University of Texas at San Antonio, San Antonio, TX, 78249, USA
SOURCE: Analytical Biochemistry (1999), 267(2), 344-350
CODEN: ANBCA2; ISSN: 0003-2697
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB SDS-PAGE of chromatog. fractions requires prior removal of salts, detergents, denaturants, or organic solvents which may perturb the electrophoretic separation Likewise, to successfully visualize minute amts. of protein present in chromatog. fractions, they must often be concentrated before anal. by SDS-PAGE. In this study, we used a dye precipitation procedure for simultaneous removal of interfering substances and concentration of dilute samples (ng/mL) before anal. by SDS-PAGE. Nanogram amts. of protein (143 ng) were effectively precipitated with a pyrogallol red-molybdate reagent from commonly used chromatog. buffers containing various interfering solutes or solvents. Proteins were successfully precipitated from solution in the presence of organic solvents (acetonitrile, methanol, 2-propanol), chaotropic agents (6 M urea, 6 M guanidine-HCl), a protein stabilizer (40% sucrose), metal chelators (30 mM EDTA and 30 mM EGTA), or high salt (1.0 M NaCl). Detergents, at concns. up to twice their critical micelle concns., from the nonionic class (Triton X-100, Tween 20) or from the zwitterionic class (3-[(3-cholamidopropyl)dimethylammonio]-1- propanesulfonate) did not inhibit protein precipitation Some interference was observed when proteins were precipitated in the presence of ammonium sulfate (0.5-2.0 M). Proteins did not precipitate in the presence of ionic detergents (SDS and cetyltrimethylammonium bromide). The sensitivity of the combined pyrogallol red-molybdate precipitation/SDS-PAGE procedure is approx. 7 ng. Two other methods of precipitating proteins (trichloroacetic acid and phenol-ether) both exhibited varying degrees of effectiveness, ranging from 714 to 7 ng/mL, in the precipitation of individual proteins. In summary, the pyrogallol red-molybdate protein precipitation procedure facilitates the SDS-PAGE anal. of dilute protein samples (ng/mL) from chromatog. fractions of various compns. The method is useful for rapid pilot-scale protein fractionation and facilitates the ongoing propensity of researchers to work with minuscule amts. of protein. (c) 1999 Academic Press.

IT 75621-03-3, (3-[(3-Cholamidopropyl)dimethylammonio]-1-propanesulfonate)
(precipitation of dilute chromatog. samples (ng/mL) containing interfering substances for SDS-PAGE)

RN 75621-03-3 HCAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 9-7 (Biochemical Methods)
IT Denaturants
Detergents
Polyacrylamide gel electrophoresis
Precipitation (chemical)
Sample preparation
(precipitation of dilute chromatog. samples (ng/mL) containing interfering substances for SDS-PAGE)
IT 57-09-0, Cetyltrimethylammonium bromide 151-21-3, Sodium dodecyl sulfate, analysis 75621-03-3, (3-[(3-Cholamidopropyl)dimethylammonio]-1-propanesulfonate)
(precipitation of dilute chromatog. samples (ng/mL) containing interfering substances for SDS-PAGE)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Allen, R	1984			Gel Electrophoresis	
Ansorge, W	1985	11	13	J Biochem Biophys Me	HCAPLUS
Laemmli, U	1970	227	680	Nature	HCAPLUS
Marshall, T	1993	39	2314	Clin Chem	HCAPLUS
Marshall, T	1992	13	887	Electrophoresis	HCAPLUS
Marshall, T	1995	16	28	Electrophoresis	HCAPLUS
Marshall, T	1996	17	1265	Electrophoresis	HCAPLUS
Ozols, J	1990	182	581	Methods Enzymol	
Pohl, T	1990	182	68	Methods Enzymol	HCAPLUS
Sauve, D	1995	226	382	Anal Biochem	HCAPLUS
Sherwood, R	1992	11	287	Methods Mol Bio	HCAPLUS
Shojaee, N	1996	17	687	Electrophoresis	HCAPLUS
Watanabe, N	1986	32	1551	Clin Chem	HCAPLUS
Ziegler, J	1997	250	257	Anal Biochem	HCAPLUS

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L27 ANSWER 46 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:792737 HCAPLUS Full-text
DOCUMENT NUMBER: 130:150021
TITLE: Rotational dynamics of spin-labeled surfactant-associated proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and dipalmitoylphosphatidylglycerol bilayers
AUTHOR(S): Cruz, Antonio; Marsh, Derek; Perez-Gil, Jesus
CORPORATE SOURCE: Facultad Biologia, Departamento Bioquimica, Universidad Complutense, Madrid, 28040, Spain
SOURCE: Biochimica et Biophysica Acta, Biomembranes (

1998), 1415(1), 125-134
CODEN: BBBMBS; ISSN: 0005-2736
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

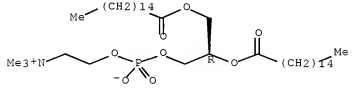
AB Pulmonary surfactant proteins SP-B and SP-C have been isolated from porcine lungs and selectively labeled with 2,2,6,6-tetramethylpiperidine-N-oxyl (TEMPO)-isothiocyanate at their N-terminal amine ends, to analyze the mobility of both proteins on the nanosecond time scale using ESR spectroscopy. Reconstitution of the labeled forms of these proteins in bilayers of dipalmitoylphosphatidylcholine (DPPC) or dipalmitoylphosphatidylglycerol (DPPG) results in much broader and anisotropic ESR spectra, indicating a large restriction in rotational mobility of the protein-attached probe when inserted in membranes. Distinctive differences were found between the ESR spectra of the two polypeptides, that were consistent with intrinsic differences in mode of interaction of SP-B and SP-C with phospholipid bilayers. The mobility of the protein spin probes was sensitive to temperature on the time scale of conventional spin-label ESR. Both proteins, TEMPO-SP-B and TEMPO-SP-C, showed considerable increases in mobility at temps. above the pretransition of pure DPPC. Finally, the mobility of the spin probes attached to both SP-B and SP-C was more restricted in DPPG than in DPPC bilayers, demonstrating that electrostatic interactions of the pos. charged residues at the protein surface influence the rotational dynamics of the proteins in anionic lipid bilayers. Although some residual segmental mobility of the thiourea-linked probes cannot be discounted, the results clearly reflect preferential differences in overall protein dynamics in gel and fluid phases of the two phospholipids that could be important for the biophys. properties of surfactant bilayers and monolayers.

IT 63-89-8
(rotational dynamics of spin-labeled surfactant-associated proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and dipalmitoylphosphatidylglycerol bilayers)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 6-3 (General Biochemistry)

ST rotational dynamics surfactant protein B C bilayer

IT Surfactant proteins (pulmonary)
(SP-B; rotational dynamics of spin-labeled surfactant -associated proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and dipalmitoylphosphatidylglycerol bilayers)

IT Surfactant proteins (pulmonary)
(SP-C; rotational dynamics of spin-labeled surfactant -associated proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and dipalmitoylphosphatidylglycerol bilayers)

IT Membrane, biological
(bilayer; rotational dynamics of spin-labeled surfactant
-associated proteins SP-B and SP-C in dipalmitoylphosphatidylcholine
and dipalmitoylphosphatidylglycerol bilayers)
IT Conformational transition
Molecular rotation
(rotational dynamics of spin-labeled surfactant-associated
proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and
dipalmitoylphosphatidylglycerol bilayers)
IT 63-89-8 185463-23-4
(rotational dynamics of spin-labeled surfactant-associated
proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and
dipalmitoylphosphatidylglycerol bilayers)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Camacho, L	1996	5	271	Colloids Surf B Bioi	HCAPLUS
Creuwels, L	1996	1285	1	Biochim Biophys Acta	HCAPLUS
Creuwels, L	1997	175	1	Lung	HCAPLUS
Cruz, A	1997	327	133	Biochem J	HCAPLUS
Cruz, A	1998	37	9488	Biochemistry	HCAPLUS
Cruz, A	1995	1255	68	Biochim Biophys Acta	HCAPLUS
Curstedt, T	1987	168	255	Eur J Biochem	HCAPLUS
Dico, A	1997	36	4172	Biochemistry	HCAPLUS
Fajer, P	1989	28	5634	Biochemistry	HCAPLUS
Farahbakhsh, Z	1992	56	1019	Photochem Photobiol	HCAPLUS
Gordon, L	1992	1139	257	Biochim Biophys Acta	HCAPLUS
Gordon, L	1996	5	1662	Protein Sci	HCAPLUS
Griffith, O	1976		453	Spin Labeling Theory	HCAPLUS
Hamm, H	1996	90	251	Respir Med	MEDLINE
Hoffmann, W	1980	141	119	J Mol Biol	HCAPLUS
Johansson, J	1994	33	6015	Biochemistry	HCAPLUS
Johansson, J	1997	244	675	Eur J Biochem	HCAPLUS
Kresch, M	1996	51	1137	Thorax	MEDLINE
Lipp, M	1996	273	1196	Science	HCAPLUS
Marsh, D			707	Advanced EPR Applica	
Marsh, D	1980	19	1632	Biochemistry	HCAPLUS
Marsh, D	1982	2	53	Lipid-protein Intera	HCAPLUS
Marsh, D	1981		51	Membrane Spectroscop	HCAPLUS
McMullen, T	1995	69	169	Biophys J	HCAPLUS
Mchaourab, H	1993	32	11895	Biochemistry	HCAPLUS
Mchaourab, H	1994	33	6691	Biochemistry	HCAPLUS
Morrow, M	1993	32	11338	Biochemistry	HCAPLUS
Morrow, M	1993	32	4397	Biochemistry	HCAPLUS
Nag, K	1996	71	246	Biophys J	HCAPLUS
Nag, K	1997	72	2638	Biophys J	HCAPLUS
Oosterlaken-Dijksterhui	1991	30	8276	Biochemistry	HCAPLUS
Pastrana, B	1991	30	10058	Biochemistry	HCAPLUS
Pastrana-Rios, B	1994	33	5121	Biochemistry	HCAPLUS
Pastrana-Rios, B	1995	69	2531	Biophys J	HCAPLUS
Perez-Gil, J	1992	70	332	Biochem Cell Biol	HCAPLUS
Perez-Gil, J	1995	34	3964	Biochemistry	HCAPLUS
Perez-Gil, J	1993	1168	261	Biochim Biophys Acta	HCAPLUS
Perez-Gil, J	1998	1408	203	Biochim Biophys Acta	HCAPLUS
Perez-Gil, J	1994		93	Biological Membranes	HCAPLUS
Perez-Gil, J	1992	63	197	Biophys J	HCAPLUS
Shiffer, K	1993	32	590	Biochemistry	HCAPLUS
Snel, M	1995	34	3605	Biochemistry	HCAPLUS
Spragg, R	1997	155	756	Am J Respir Crit Car	MEDLINE

Sternberg, B	1989	980	117	Biochim Biophys Acta	HCAPLUS
Taneva, S	1994	33	14660	Biochemistry	HCAPLUS
Taneva, S	1997	36	912	Biochemistry	HCAPLUS
Taneva, S	1994	66	1158	Biophys J	HCAPLUS
Vandenbussche, G	1992	31	9169	Biochemistry	HCAPLUS
Vandenbussche, G	1992	203	201	Eur J Biochem	HCAPLUS

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L27 ANSWER 47 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:484928 HCAPLUS Full-text
DOCUMENT NUMBER: 129:113548
ORIGINAL REFERENCE NO.: 129:23207a,23210a
TITLE: Pharmaceutical or cosmetic compositions containing homogeneously charged particulate vector
INVENTOR(S): Betbeder, Didier; Major, Michel
PATENT ASSIGNEE(S): Biovector Therapeutics S.A., Fr.
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9829102	A1	19980709	WO 1997-FR2397 <--	19971223
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2757768	A1	19980703	FR 1996-16146 <--	19961227
FR 2757768	B1	19990402		
CA 2276692	A1	19980709	CA 1997-2276692 <--	19971223
AU 9856688	A	19980731	AU 1998-56688 <--	19971223
EP 946153	A1	19991006	EP 1997-952990 <--	19971223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001508425	T	20010626	JP 1998-529682 <--	19971223

PRIORITY APPLN. INFO.:	FR 1996-16146 <--	A	19961227
	WO 1997-FR2397 <--	W	19971223

AB The invention concerns a particulate carrier comprising a non-liquid hydrophilic nucleus; an amphiphilic lamella characterized in that the nucleus carries a global cationic, anionic or neutral charge and that the amphiphilic lamella carries a global charge of same polarity as that carried by the nucleus. The invention also concerns a pharmaceutical or cosmetic composition or a nutrient additive containing such a vector. Thus, maltodextrin (500 g) was treated with 7 g NaBH4 followed by the reaction with NaOH, 30.25 mL

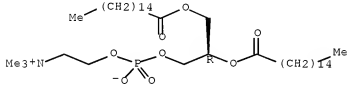
epichlorohydrin and 382.3 g glycidyltrimethylammonium chloride. The resulting gel was diluted with water a and neutralized with HOAc. Nanoparticle carriers were prepared by using the above polysaccharide and a phospholipid.

IT 63-89-8, DPPC
(pharmaceutical or cosmetic compns. containing homogeneously charged particulate vector)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IC ICM A61K0009-51
ICS A61K0009-127

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17, 33, 62

IT Drug delivery systems
(nanoparticles; pharmaceutical or cosmetic compns. containing homogeneously charged particulate vector)

IT Analgesics
Anesthetics
Anti-inflammatory agents
Antiasthmatics
Antibacterial agents
Antibiotics
Anticonvulsants
Antidepressants
Antidiabetic agents
Antihistamines
Antimalarials
Antipsychotics
Antitumor agents
Antiviral agents
Anxiolytics
Appetite depressants
Cardiovascular agents
Cosmetics
Fungicides
Hemostatics
Hypnotics and Sedatives
Immunomodulators
Insecticides
Muscarinic antagonists
Surfactants
Vaccines
(pharmaceutical or cosmetic compns. containing homogeneously charged particulate vector)

IT 57-88-5, Cholesterol, biological studies 63-89-8, DPPC

124-30-1, Stearylamine 3036-82-6, Dipalmitoylphosphatidylserine 4537-77-3, Dipalmitoylphosphatidylglycerol 4537-78-4, Distearoylphosphatidylglycerol 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9005-25-8, Starch, biological studies 9050-36-6D, Maltodextrin, ethers 19698-29-4, Dipalmitoylphosphatidic acid 30170-00-4, Dimyristoylphosphatidic acid 61361-72-6, Dimyristoylphosphatidylglycerol 62700-69-0, Dioleoylphosphatidylglycerol 137720-22-0D, 1-acylated 144189-73-1, DOTAP

(pharmaceutical or cosmetic compns. containing homogeneously charged particulate vector)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
A Et S Biovecteurs	1994			WO 9420078 A	HCAPLUS
Haynes	1996			US 35338 E	HCAPLUS
Lipogel	1995			WO 9527477 A	HCAPLUS
Rhone-Poulenc Rorer	1991			WO 9115193 A	HCAPLUS
The University Of Tenne	1988			EP 0277776 A	HCAPLUS

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 48 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:397567 HCAPLUS Full-text
DOCUMENT NUMBER: 129:180443
ORIGINAL REFERENCE NO.: 129:36561a,36564a
TITLE: Investigating liquid surfaces down to the nanometer scale using grazing incidence x-ray scattering
AUTHOR(S): Fradin, C.; Braslau, A.; Luzet, D.; Alba, M.; Gourier, C.; Daillant, J.; Grubel, G.; Vignaud, G.; Legrand, J. F.; Lal, J.; Petit, J. M.; Rieutord, F.
CORPORATE SOURCE: Service de Physique de l'Etat Condense, Orme Merisiers, CEA Saclay, Gif-sur-Yvette, F-91191, Fr.
SOURCE: Physica B: Condensed Matter (Amsterdam) (1998), 248, 310-315
CODEN: PHYBE3; ISSN: 0921-4526
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Grazing incidence X-ray surface scattering has been used to investigate liquid surfaces down to the mol. scale. The free surface of water is well described by the capillary wave model (<z(q)z(-q)>∝q-2 spectrum) up to wave vectors >108 m-1. At larger wave vectors near-surface acoustic waves must be taken into account. When the interface is bounded by a surfactant monolayer, it exhibits a bending stiffness and the bending rigidity modulus can be measured. However, bending effects generally cannot be described using the Helfrich Hamiltonian and the characteristic exponent in the roughness power spectrum can be smaller than 4. Finally, upon compression, tethered monolayers formed on a subphase containing divalent ions are shown to buckle in the third dimension with a characteristic wavelength on the order of 108 m-1.

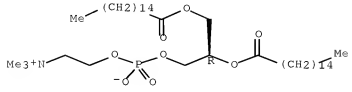
IT 63-89-8, l-α-Dipalmitoylphosphatidylcholine
(adsorbed monolayers; investigating liquid surfaces down to the nanometer scale using grazing incidence x-ray scattering)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt,

4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 66-1 (Surface Chemistry and Colloids)
ST liq surface structure x ray scattering; surfactant adsorbed monolayer water surface
IT Adsorbed monolayers
Nanostructures
Surface structure
Surfactants
X-ray scattering
(investigating liquid surfaces down to the nanometer scale using grazing incidence x-ray scattering)
IT 63-89-8, 1-α-Dipalmitoylphosphatidylcholine
506-30-9, Arachidic acid
(adsorbed monolayers; investigating liquid surfaces down to the nanometer scale using grazing incidence x-ray scattering)
IT 7732-18-5, Water, properties
(investigating liquid surfaces down to the nanometer scale using grazing incidence x-ray scattering)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abraham, F	1991	67	1669	Phys Rev Lett	HCAPLUS
Abraham, F	1990	249	393	Science	HCAPLUS
Albrecht, O	1978	39	301	J Phys France	HCAPLUS
Bayerl, T	1990	57	1095	Biophys J	HCAPLUS
Bayerl, T	1997	78	3157	Phys Rev Lett	
Bosio, L	1984	80	959	J Chem Phys	HCAPLUS
Braslau, A	1988	38	2457	Phys Rev A	
Braslau, A	1985	54	114	Phys Rev Lett	HCAPLUS
Buff, F	1965	15	621	Phys Rev Lett	
Carlson, J	1987	36	3359	Phys Rev A	HCAPLUS
Daillant, J	1992	97	5824	J Chem Phys	HCAPLUS
Daillant, J	1996	92	505	J Chem Soc Faraday T	HCAPLUS
Daillant, J	1991	1	149	J Phys France II	HCAPLUS
Dietrich, S	1995	260	1	Phys Rep	HCAPLUS
Gourier, C	1997	78	3157	Phys Rev Lett	HCAPLUS
Helfrich, W	1973	28	693	Z Naturforschung	HCAPLUS
Le Doussal, P	1992	69	1209	Phys Rev Lett	HCAPLUS
Lipowsky, R	1990	65	2893	Phys Rev Lett	HCAPLUS
Loudon, R	1984	9		Surface Excitations	
Lu, B	1978	68	5558	J Chem Phys	HCAPLUS
Meunier, J	1987	48	1819	J Physique	HCAPLUS
Nelson, D	1987	48	1085	J Phys France	HCAPLUS
Niaporkowski, M	1993	47	1836	Phys Rev E	
Peliti, L	1989	50	1557	J Phys France	

Petsche, I	1993	1741		J Phys I France 1	
Rowlinson, J	1982			Molecular Theory of	
Sackmann, E	1995	1A		Handbook of Biologic	
Sanyal, M	1991	66	628	Phys Rev Lett	HCAPLUS
Schwartz, D	1990	41	5687	Phys Rev A	HCAPLUS
Sinha, S	1996	1	645	Current Opinion Soli	HCAPLUS
Sinha, S	1988	38	2297	Phys Rev B	
Thomas, R	1996	1	23	Current Opinion Coll	HCAPLUS

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L27 ANSWER 49 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:36708 HCAPLUS Full-text
DOCUMENT NUMBER: 128:121528
ORIGINAL REFERENCE NO.: 128:23690h,23691a
TITLE: Photochemical Generation of Gold Nanoparticles in Langmuir-Blodgett Films
AUTHOR(S): Ravaine, Serge; Fanucci, Gail E.; Seip, Candace T.; Adair, James H.; Talham, Daniel R.
CORPORATE SOURCE: Department of Chemistry, University of Florida, Gainesville, FL, 32611-7200, USA
SOURCE: Langmuir (1998), 14(3), 708-713
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

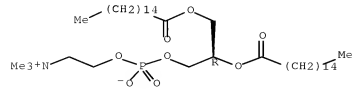
AB Gold nanoparticles were generated by UV irradiation of Langmuir-Blodgett (LB) films of octadecylamine (ODA), 4-hexadecylaniline (HDA), and benzyldimethylstearylammonium chloride monohydrate (BDSAC) deposited from aqueous HAuCl4 subphases. In contrast, no gold crystals were observed in irradiated LB films prepared from monolayers of dipalmitoyl-DL-α-phosphatidyl-L-serine (DPPS) and dipalmitoyl-L-α-phosphatidylcholine (DPPC). XPS, UV-visible absorption spectroscopy, atomic force microscopy, and transmission electron microscopy measurements indicated the marked influence of the surfactants used to prepare the LB matrix on the shape of the gold particles. Particles formed in ODA and BDSAC LB films were grown with well-defined crystal faces, while particles generated in HDA LB films were irregular in shape.

IT 63-89-8, Dipalmitoyl-L-α-phosphatidylcholine
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)
Section cross-reference(s): 75
ST gold nanoparticle photoprodn Langmuir Blodgett film; photoredn Langmuir Blodgett film chloroauric acid
IT UV and visible spectra
(absorption; photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT Crystal morphology
Langmuir-Blodgett films
Nanoparticles
Photolysis
Reduction, photochemical
Surface pressure-area isotherms
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT Phospholipids, uses
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT Surfactants
(surfactants effect on photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT 63-89-8, Dipalmitoyl-L-α-phosphatidylcholine 3036-82-6, Dipalmitoylphosphatidylserine
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT 122-19-0, Benzyldimethylstearylammonium chloride 124-30-1, Octadecylamine 79098-13-8, 4-Hexadecylaniline
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT 7440-57-5P, Gold, properties
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
IT 16903-35-8, Chloroauric acid
(photochem. generation of gold nanoparticles in Langmuir-Blodgett films)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adair, J				Mat Sci Eng Rev, in	
Barraud, A	1985	133	133	Thin Solid Films	HCAPLUS
Belbeoch, B	1985	82	701	J Chim Phys Phys-Chi	HCAPLUS
Betts, J	1956	52	1581	Trans Faraday Soc	HCAPLUS
Blois, D	1971	36	226	J Colloid Interface	HCAPLUS
Burkett, S	1996		321	J Chem Soc, Chem Com	HCAPLUS
Clemente-Leon, M	1997	13	2340	Langmuir	HCAPLUS
Duff, D	1987	26	676	Angew Chem, Int Ed E	
Duff, D	1993	9	2301	Langmuir	HCAPLUS
Esumi, K	1992	149	295	J Colloid Interface	HCAPLUS
Esumi, K	1995	11	3285	Langmuir	HCAPLUS
Foss, C	1994	98	2963	J Phys Chem	HCAPLUS
Fujihira, M	1986	199	481	J Electroanal Chem	HCAPLUS
Gaines, G	1966			Insoluble Monolayers	
Genzel, L	1975	B21	339	Z Phys	
Grabar, K	1996	118	1148	J Am Chem Soc	HCAPLUS
Hache, F	1988	A47	347	Appl Phys	HCAPLUS
Haruta, M	1987		405	Chem Lett	HCAPLUS
Heywood, B	1992	114	4681	J Am Chem Soc	HCAPLUS
Heywood, B	1991	87	735	J Chem Soc, Faraday	HCAPLUS
Heywood, B	1992	8	1492	Langmuir	HCAPLUS

Kern, W	1990	137	1887	J Electrochem Soc	HCAPLUS
Kotov, N	1993	9	3710	Langmuir	HCAPLUS
Kurihara, K	1983	105	2574	J Am Chem Soc	HCAPLUS
Landau, E	1989	111	1436	J Am Chem Soc	HCAPLUS
Landau, E	1985	318	353	Nature	HCAPLUS
Leloup, J	1985	82	695	J Chim Phys Phys-Chi	HCAPLUS
Mann, S	1988	334	692	Nature	HCAPLUS
Marks, L	1981	54	425	J Cryst Growth	HCAPLUS
Marks, L	1979	282	196	Nature	HCAPLUS
Mayya, K	1997	13	2575	Langmuir	HCAPLUS
Meldrum, F	1995	7	1112	Chem Mater	HCAPLUS
Meldrum, F	1993	161	66	J Colloid Interface	HCAPLUS
Meldrum, F	1994	10	2035	Langmuir	HCAPLUS
Minones, J	1988	266	353	Colloid Polym Sci	HCAPLUS
Mitchell, M	1988	110	712	J Am Chem Soc	HCAPLUS
Pallas, N	1985	1	509	Langmuir	HCAPLUS
Peng, J	1987	3	1096	Langmuir	HCAPLUS
Pike, J	1993	115	8497	J Am Chem Soc	HCAPLUS
Preston, C	1993	97	8405	J Phys Chem	
Rajam, S	1991	87	727	J Chem Soc, Faraday	HCAPLUS
Ruaudel-Texier, A	1986	134	347	Mol Cryst Liq Cryst	
Schmitt, J	1997	9	61	Adv Mater	HCAPLUS
Smith, D	1981	54	433	J Cryst Growth	HCAPLUS
Tanahashi, I	1995	181	77	J Non-Cryst Solids	HCAPLUS
Turkevich, J	1951	11	55	J Discuss Faraday So	
Weissbuch, I	1988	110	561	J Am Chem Soc	HCAPLUS
Wokaun, A	1985	56	1	Mol Phys	HCAPLUS
Yi, K	1995	99	9869	J Phys Chem	HCAPLUS
Zhang, Y	1996	274	150	Thin Solid Films	HCAPLUS
Zhao, X	1990	171	558	Chem Phys Lett	HCAPLUS
Zhao, X	1992	96	9933	J Phys Chem	HCAPLUS

OS.CITING REF COUNT: 54 THERE ARE 54 CAPLUS RECORDS THAT CITE THIS RECORD (54 CITINGS)

L27 ANSWER 50 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:388374 HCAPLUS Full-text
DOCUMENT NUMBER: 127:126386
ORIGINAL REFERENCE NO.: 127:24273a,24276a
TITLE: Characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles
AUTHOR(S): Major, M.; Prieur, E.; Tocanne, J. F.; Betbeder, D.; Sautereau, A. M.
CORPORATE SOURCE: Biovector Therapeutics, Chemin du Chene vert, BP 169, 31676, Labege, Fr.
SOURCE: Biochimica et Biophysica Acta, Biomembranes (1997), 1327(1), 32-40
CODEN: BBBMBS; ISSN: 0005-2736
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In this paper a new drug carrier, the Light-biovector, is described. These biovectors are composed of a neutral, anionic or cationic polysaccharidic core surrounded by phospholipids. They can be prepared with high yield and in a nearly pure form as determined by d. anal. on sucrose gradients. These particles showed great stability with no sedimentation being observed after more than one year of storage. Physicochem. studies carried out with dipalmitoylphosphatidylcholine and dipalmitoylphosphatidylcholine/dipalmitoylphosphatidylglycerol mixts. showed that in Light-biovectors, the lipids are organized in bilayer surrounding the

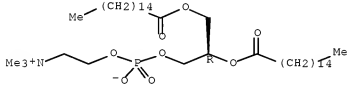
polysaccharidic core. In presence of a neutral polysaccharidic core, the gel to liquid phase transition temperature Tm of DPPC was only slightly affected as compared to liposomal dispersions of the lipid. In contrast, for cationic and anionic Light-biovectors, the Tm of the lipids was affected by the elec. charge born by the polysaccharidic core, indicating that electrostatic interactions contribute to the organization of the lipid bilayer in these systems. It was also found that the association of anionic membrane to anionic polysaccharidic cores and the association of cationic membrane to cationic polysaccharidic cores was possible.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 63-5 (Pharmaceuticals)

ST biovector polysaccharide phospholipid nanoparticle

IT Glass transition temperature
(characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

IT Phospholipids, biological studies
Polysaccharides, biological studies
(characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

IT Drug delivery systems
(liposomes; characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

IT Drug delivery systems
(nanoparticles; characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

IT 9050-36-6, Maltodextrin
(characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

IT 106-89-8DP, Epichlorohydrin, reaction products with maltodextrin 3033-77-0DP, Glycidyltrimethylammonium chloride, reaction products with maltodextrin
(characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

IT 63-89-8, Dipalmitoylphosphatidylcholine 4537-77-3, Dipalmitoylphosphatidylglycerol
(characterization and phase behavior of phospholipid bilayers adsorbed on spherical polysaccharidic nanoparticles)

OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS

RECORD (32 CITINGS)

L27 ANSWER 51 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:58122 HCAPLUS Full-text
DOCUMENT NUMBER: 126:154424
ORIGINAL REFERENCE NO.: 126:29791a,29794a
TITLE: Enzymic activity of cytochrome C-oxidase inserted into magnetoliposomes differing in surface charge density
AUTHOR(S): De Cuyper, Marcel; De Meulenaer, Bruno; Van Der Meeren, Pol; Vanderdeelen, Jan
CORPORATE SOURCE: Interdisciplinary Research Centre, Katholieke Universiteit Leuven - Campus, Kortrijk, B-8500, Belg.
SOURCE: Biocatalysis and Biotransformation (1995), 13(2), 77-87
CODEN: BOBOEQ; ISSN: 1024-2422
PUBLISHER: Harwood
DOCUMENT TYPE: Journal
LANGUAGE: English

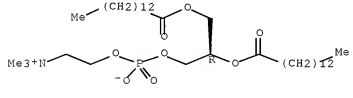
AB The role played by the surface charge d. of the phospholipid coat of nanometer-sized Fe3O4 colloids (so-called "magnetoliposomes") in the catalytic activity of beef heart cytochrome c oxidase was investigated. Screening of various binary mixts. of the anionic dimyristoylphosphatidylglycerol and the zwitterionic dimyristoylphosphatidylcholine demonstrated that the highest degree of reactivation was found in the lower neg. charge range. Pre-incubation of the charged colloidal biocatalytic particles with cytochrome c induced aggregation and reduced overall enzymic activity. The results are interpreted in terms of a different affinity of the substrate for the various membrane types and of a reorganization of the enzyme within the membrane matrixes.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(enzymic activity of cytochrome C-oxidase inserted into magnetoliposomes differing in surface charge d.)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 7-7 (Enzymes)

IT 18194-24-6, Dimyristoylphosphatidylcholine 61361-72-6, Dimyristoylphosphatidylglycerol
(enzymic activity of cytochrome C-oxidase inserted into magnetoliposomes differing in surface charge d.)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File

Abramovitch, D	1990	1020	34	Biochim Biophys Acta	HCAPLUS
Barlow, G	1966	241	1473	J Biol Chem	HCAPLUS
Carroll, R	1977	252	6981	J Biol Chem	HCAPLUS
Casey, R	1984	768	319	Biochem Biophys Acta	HCAPLUS
Choi, S	1995	54	271	Biophys Chem	HCAPLUS
Cooper, C	1990	1017	187	Biochem Biophys Acta	HCAPLUS
Cortese, J	1995	1228	216	Biochem Biophys Acta	HCAPLUS
Daum, G	1985	822	1	Biochim Biophys Acta	HCAPLUS
de Cuyper, M	1990	1027	172	Biochim Biophys Acta	HCAPLUS
de Cuyper, M	1992	16	201	Biotechnol Appl Bioc	HCAPLUS
de Cuyper, M				Biotechnol Bioeng (i	
de Cuyper, M	1988	15	311	Eur Biophys J	HCAPLUS
de Cuyper, M	1980	104	397	Eur J Biochem	HCAPLUS
de Cuyper, M	1993	122	340	J Magn Magn Mat	HCAPLUS
de Cuyper, M	1991	7	647	Langmuir	HCAPLUS
de Jongh, H	1995	360	255	FFBS Letters	HCAPLUS
Devaux, P	1986	25	3804	Biochemistry	HCAPLUS
Errede, B	1976	73	113	Proc Natl Acad Sci U	HCAPLUS
Gibson, Q	1965	240	888	J Biol Chem	HCAPLUS
Heimburg, T	1993	65	2408	Biophys J	HCAPLUS
Heimburg, T	1995	68	536	Biophys J	HCAPLUS
Kakinoki, K	1995	170	18	J Colloid Interface	HCAPLUS
Lee, S	1989	271	188	Arch Biochem Biophys	HCAPLUS
Lentz, B	1980	19	2555	Biochemistry	HCAPLUS
Malatesta, F	1995	54	1	Biophys Chem	HCAPLUS
Marsh, D	1995	68	A240	Biophys J Abstract W	
Muga, A	1991	30	7219	Biochemistry	HCAPLUS
Nicholls, P	1973	1	372	Trans Biochem Soc	HCAPLUS
Papahadjopoulos, D	1975	401	317	Biochim Biophys Acta	HCAPLUS
Robinson, N	1985	24	6298	Biochemistry	HCAPLUS
Robinson, N	1990	29	8962	Biochemistry	HCAPLUS
Rytomaa, M	1994	269	1770	J Biol Chem	HCAPLUS
Rytomaa, M	1995	270	3197	J Biol Chem	HCAPLUS
Steverding, D	1989	257	131	Febs Letters	HCAPLUS
Teissie, J	1981	20	1554	Biochemistry	HCAPLUS
Trivedi, A	1986	64	1195	Biochem Cell Biol	HCAPLUS
van der Meeren, P	1992	2	23	J Liposome Res	
White, D	1973	3	441	Form and Function of	HCAPLUS
Yu, C	1975	250	1383	J Biol Chem	HCAPLUS

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L27 ANSWER 52 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:529411 HCAPLUS Full-text

DOCUMENT NUMBER: 125:189362

ORIGINAL REFERENCE NO.: 125:35323a,35326a

TITLE: Impact of the surface charge of magnetoproteoliposomes on the enzymic oxidation of cytochrome c

AUTHOR(S): De Cuyper, M.

CORPORATE SOURCE: Interdisciplinary Research Centre, Katholieke Universiteit Leuven, Kortrijk, B-8500, Belg.

SOURCE: Progress in Colloid & Polymer Science (1996), 100(Trends in Colloid and Interface Science X), 306-310
CODEN: PCPSD7; ISSN: 0340-255X

PUBLISHER: Steinkopff

DOCUMENT TYPE: Journal

LANGUAGE: English

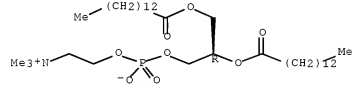
AB Upon immersing nanometer-sized Fe3O4 colloids in aqueous dispersions of phospholipid vesicles, a lipid bilayer is generated on the particle surface. The resulting "magnetoliposomes" can act as excellent host for membrane-bound enzymes, such as cytochrome c oxidase [De Cuyper and Joniau, Biotechnol. Appl. Biochem. 16, 201-210 (1992)]. In an attempt to tailor the catalytic properties of the immobilized enzyme, the authors have explored the pivotal role played by the surface charge d. of the magnetoliposome coat. In this respect, the authors have screened a series of bilayered phospholipid coatings consisting of anionic dimyristoylphosphatidylglycerol (DMPG), zwitterionic dimyristoylphosphatidylcholine (DMPC) or variable mixts. of the two. A cationic lipid coating, made of a heterogeneous mixture of DMPC and and dioctadecyldimethylammoniumbromide, was also tested. The profiles, representing the enzymic activity which was measured spectrophotometrically at 550 nm and, if need be, corrected for scattered light due to clustering phenomena, showed that the highest degree of catalytic activity of lipid embedded enzyme was found when moderately charged, anionic magnetoliposomes (5 to 10% DMPG) were used. The results are interpreted in terms of a different affinity of the substrate for the various membrane types.

IT 18194-24-6, Dimyristoylphosphatidylcholine
(impact of the surface charge of magnetoproteoliposomes on the enzymic oxidation of cytochrome c)

RN 18194-24-6 HCAPLUS

CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 7-7 (Enzymes)

IT 3700-67-2, Dioctadecyldimethylammoniumbromide 18194-24-6, Dimyristoylphosphatidylcholine 61361-72-6, Dimyristoylphosphatidylglycerol
(impact of the surface charge of magnetoproteoliposomes on the enzymic oxidation of cytochrome c)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 53 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:576277 HCAPLUS Full-text

DOCUMENT NUMBER: 119:176277

ORIGINAL REFERENCE NO.: 119:31398h,31399a

TITLE: Conformational effects of metal salt binding to the polar head of phosphatidylcholines investigated by FTIR spectroscopy

AUTHOR(S): Gradadolnik, J.; Hadzi, D.

CORPORATE SOURCE: Natl. Inst. Chem., Ljubljana, 61115, Slovenia

SOURCE: Chemistry and Physics of Lipids (1993), 65(2), 121-32
CODEN: CPLIA4; ISSN: 0009-3084

DOCUMENT TYPE: Journal
LANGUAGE: English

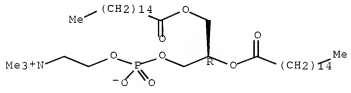
AB FTIR spectra of DPPC multibilayers with metal salts incorporated (EuCl3, Eu(NO3)3, UO2(NO3)2, CaCl2, Ca(NO3)2, MgCl2, NaCl, NaNO3, LiCl, LiNO3), dry and hydrated, were investigated with particular attention to bands that are expected to be indicative of the conformation of choline, phosphate and acyl ester moieties. Some egg lecithin and DOPC complexes were also examined The band at 875 cm-1, assigned to a mixed mode involving C-N stretching of the choline chain with s.c. conformation in $\alpha 5$ appears in all samples suggesting that no major conformational changes in $\alpha 5$ occur on complexing. This is in agreement with the Raman spectroscopic work of Akutsu (H. Akutsu et al. (1986) Biochim. Biophys. Acta 854, 213-218). The sym. C-N(CH3)3 stretching mode gives rise to three bands near 930, 916 and 906 cm-1 which are assigned to distinct rotamers in $\alpha 4$. Relative intensities of these bands permit an estimation of the rotamer populations. Metal salt binding favors the ap conformation in $\alpha 4$. Exceptions to this general result appear with some nitrate complexes (Ca, UO2) in dry multibilayer prepns. in which the ac rotamers are dominant. However, in the aqueous dispersions the ap rotamers are dominant throughout. The critical examination of the phosphate bands shows the effects of cation binding to exceed the expected conformational effects and therefore it is not possible to infer anything definite about the latter. The behavior of the antisym. PO2- stretching frequencies is discussed in terms of the nature of binding of the cations. The components of the carbonyl absorption exhibit, upon metal salt binding, pronounced changes of the relative intensities that are interpreted in terms of changes of subpopulations concerning the glycerol conformation. In dry multibilayer complexes with chlorides, the low frequency of the N(CH3)3 stretching indicates the interaction of chloride with the quaternary choline terminal group. Hydration influences the cation binding and its conformational consequences but, on the whole, the present results are in fair agreement with those obtained by NMR methods. The relation of the present results to those derived from NMR techniques is discussed.

IT 63-89-8, Dipalmitoylphosphatidylcholine
(metal salt binding by, polar head group conformation response to, in membrane)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 6-6 (General Biochemistry)

IT 63-89-8, Dipalmitoylphosphatidylcholine
(metal salt binding by, polar head group conformation response to, in membrane)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

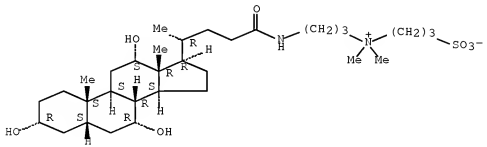
L27 ANSWER 54 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:550712 HCAPLUS Full-text
DOCUMENT NUMBER: 115:150712
ORIGINAL REFERENCE NO.: 115:25591a,25594a
TITLE: 3-[(3-Cholamidopropyl)dimethylammonio]-1-propane sulfonate as noncytotoxic stabilizing agent for growth factors
AUTHOR(S): Matuo, Yuhsi; Nishi, Nozomu; Matsumoto, Kunio; Miyazaki, Kaoru; Matsumoto, Keishi; Suzuki, Fujio; Nishikawa, Katsuzo
CORPORATE SOURCE: Upstate Biotechnol., Inc., Lake Placid, NY, 12946, USA
SOURCE: Methods in Enzymology (1991), 198(Pept. Growth Factors, Pt. C), 511-18
CODEN: MENZAU; ISSN: 0076-6879
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Growth factors are present in tissues, cells, or culture media at an extremely low content (usually <0.5 μg/g or .apprx.0.1 ng/mL). In addition, growth factors can exert biol. events at extremely low concns. [picomolar to nanomolar levels]. Growth factors, when used in dilute, highly purified form, are easily lost by irreversible adsorption to surfaces of exptl. materials, such as containers and chromatog. carriers. The loss should be minimized by using a surfactant that has low cytotoxicity for cultured mammalian cells. The title compound, a zwitterionic detergent, is less cytotoxic than many other mild detergents and can stabilize growth factors.

IT 75621-03-3, CHAPS
(as growth factor stabilizing agent)
RN 75621-03-3 HCAPLUS
CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 2-1 (Mammalian Hormones)
IT 75621-03-3, CHAPS
(as growth factor stabilizing agent)
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L27 ANSWER 55 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:627265 HCAPLUS Full-text
DOCUMENT NUMBER: 109:227265
ORIGINAL REFERENCE NO.: 109:37553a,37556a
TITLE: α-Subunit of Gk activates atrial potassium

channels of chick, rat, and guinea pig

AUTHOR(S): Kirsch, G. E.; Yatani, A.; Codina, J.; Birnbaumer, L.; Brown, A. M.

CORPORATE SOURCE: Dep. Physiol. Mol. Biophys., Baylor Coll. Med., Houston, TX, 77030, USA

SOURCE: American Journal of Physiology (1988), 254(6, Pt. 2), H1200-H1205
CODEN: AJPHAP; ISSN: 0002-9513

DOCUMENT TYPE: Journal

LANGUAGE: English

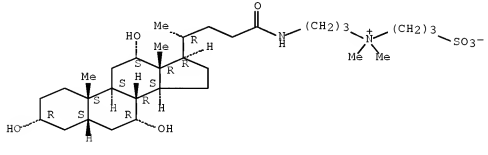
AB A specific guanine nucleotide-binding protein, Gk, is the link by which muscarinic receptors activate atrial K channels. In adult guinea pigs, the α-subunit at picomolar concns. mediates the holo-G protein effect, but in chick embryo it has been reported that the βγ-dimer at nanomolar concns. rather than the α-subunit is the effective mediator. This difference might have a phylogenetic or ontogenetic basis, and the present expts. tested these possibilities. Preactivated αk derived from human red blood cell Gk, when applied to the intracellular surface of inside-out membrane patches from the atria of embryonic chick, neonatal rat, and adult guinea pig activated single K+ channel currents. In each case, the αk-activated channels had the same single-channel conductance and mean open time as the muscarinic agonist-activated channels. Half-maximal activation was achieved at αk-concns. of 2.4-13.8 pM. Hence, αk-activation of these K+ channels is independent of differences in age or species. The detergent 3-[3-cholamidopropyl)-dimethy-ammoniol]-1-propanesulfonate (CHAPS), which was used by D. E. Logothetis et al. (1987) at 184 μM to suspend the hydrophobic βγ-dimers, activated the same currents. Thus, the effects of the βγ-dimer on these K+ channels is unknown, and as proposed earlier, it is the α-subunit that mediates the Gk effect.

IT 75621-03-3, CHAPS
(protein transport by heart in response to)

RN 75621-03-3 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-(3-sulfopropyl)-3-[[(3α,5β,7α,12α)-3,7,12-trihydroxy-24-oxocholan-24-yl]amino]-, inner salt (CA INDEX NAME)

Absolute stereochemistry.



CC 13-2 (Mammalian Biochemistry)
Section cross-reference(s): 12

IT 75621-03-3, CHAPS
(protein transport by heart in response to)

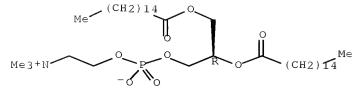
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L27 ANSWER 56 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1986:566575 HCAPLUS Full-text
DOCUMENT NUMBER: 105:166575
ORIGINAL REFERENCE NO.: 105:26765a,26768a
TITLE: Molecular details of melittin-induced lysis of phospholipid membranes as revealed by deuterium and phosphorus NMR
AUTHOR(S): Dufourc, Erick J.; Smith, Ian C. P.; Dufourcq, Jean
CORPORATE SOURCE: Cent. Rech. Paul Pascal, CNRS, Talence, 33405, Fr.
SOURCE: Biochemistry (1986), 25(21), 6448-55
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Solid-state 2H and 31P NMR studies of 2H-enriched phosphatidylcholine and ditetradecyl-rac-phospho-sn-glycero-3-glycerol [77255-34-6], as water dispersions, were undertaken to investigate the action of melittin [37231-28-0] on zwitterionic and neg. charged membrane phospholipids. When the lipid-to-protein ratio (Ri) is ≥20, the 2H and 31P NMR spectral features indicate that the system is constituted by large bilayer structures of several thousand Å curvature radius, at T > Tc (Tc, temperature of gel-to-liquid crystal phase transition of pure lipid dispersions). At T ≈ Tc, a detailed anal. of the lipid chain ordering shows that melittin induces a slight disordering of the plateau positions concomitantly with a substantial ordering of positions near the bilayer center. At T » Tc, an apparent general chain disordering is observed Apparently, melittin is in contact with the acyl chain segments and its position within the bilayer may depend on the temperature On a cooling down below Tc for Ri > 20, 2-phase spectra are observed, i.e., narrow single resonances superimposed on gel-type P and 2H powder patterns. These narrow resonances are characteristic of small structures (vesicles, micelles, ... of a few hundred Å curvature radius) undergoing fast isotropic reorientation, which average to zero both the quadrupolar and chemical shift anisotropy interactions. On an increase of the temperature above Tc, the NMR spectra indicate that the system returns reversibly to large bilayer structures. Longitudinal 2H relaxation times show that, above Tc, melittin (Ri = 20) lowers the activation energy of the acyl chain motions (those on the nanosecond time scale) and increases it immediately below Tc. Expts. carried out at Ri = 4 exhibit isotropic 2H and 31P NMR lines, above the below Tc, indicating that melittin, at these concns., precludes the formation of large lamellar lipid phases. Relaxation measurements (T1z, T2) demonstrate that lipids are still organized, as in bilayers, within the resultant very small structures. The formation of these small structures upon addition of the direct-lytic factor melittin to lipid dispersions is proposed as a mechanism for the lysis of biol. membranes, the supralysis.

IT 63-89-8
(membrane, melittin-induced lysis of, NMR of)
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

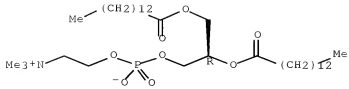
Absolute stereochemistry. Rotation (+).



CC 4-5 (Toxicology)
Section cross-reference(s): 6
IT 63-89-8 30170-00-4
(membrane, melittin-induced lysis of, NMR of)
OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)

L27 ANSWER 57 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1986:438561 HCAPLUS Full-text
DOCUMENT NUMBER: 105:38561
ORIGINAL REFERENCE NO.: 105:6329a,6332a
TITLE: Excimer dynamics of pyrenesulfonyl group covalently bound to dipalmitoyl-L-α-phosphatidylethanolamine at the lipid-water interface of dimyristoyl-L-α-phosphatidylcholine vesicles
AUTHOR(S): Tanaka, Fumio; Kaneda, Norio; Mataga, Noboru
CORPORATE SOURCE: Mie Nursing Coll., Tsu, 514, Japan
SOURCE: Journal of Physical Chemistry (1986), 90(14), 3167-75
CODEN: JPCHAX; ISSN: 0022-3654
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The reaction mechanism of excimer formation of the pyrenesulfonyl group covalently bound to dipalmitoyl-L-α- phosphatidylethanolamine embedded in dimyristoyl-L-α-phosphatidylcholine vesicles dispersed in water was investigated at various temps. by steady-state and nanosecond pulse fluorometry. The pyrenesulfonyl group forms a weakly interacting dimer in the ground state because of its location at the lipid-water interface of the vesicles. Fluorescence decay curves of both monomer and dimer can be reproduced with 2-exponential decay functions. The excimers are formed by collisional interaction of the excited monomer with the ground-state monomer and also by direct excitation of the ground-state loose dimer. These rate consts. and others are determined at each temperature by a simulation of the exptl. data. Both rate consts. for the excimer formation exhibited a min. at the temperature of phase transition of the vesicles.
IT 18194-24-6P
(liposomes, excimer formation by pyrenesulfonyl group bound to dipalmitoylphosphatidylethanolamine at lipid-water interface of)
RN 18194-24-6 HCAPLUS
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

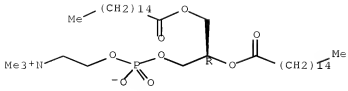
Absolute stereochemistry.



CC 9-5 (Biochemical Methods)
Section cross-reference(s): 6
IT 18194-24-6P
(liposomes, excimer formation by pyrenesulfonyl group bound to dipalmitoylphosphatidylethanolamine at lipid-water interface of)

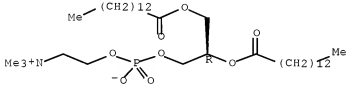
L27 ANSWER 58 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:609111 HCAPLUS Full-text
DOCUMENT NUMBER: 99:209111
ORIGINAL REFERENCE NO.: 99:32113a,32116a
TITLE: Synthesis and characterization of a fluorescence probe of the transition and dynamic properties of membranes
AUTHOR(S): Lakowicz, Joseph R.; Bevan, David R.; Maliwal, Badri P.; Cherek, Henryk; Balter, Aleksander
CORPORATE SOURCE: Sch. Med., Univ. Maryland, Baltimore, MD, 21201, USA
SOURCE: Biochemistry (1983), 22(25), 5714-22
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 6-Palmitoyl-2-[[[2-(trimethylammonium)ethyl]methyl]amino]naphthalene chloride (PTMAN) was synthesized and characterized as a new fluorescence probe whose emission spectra, anisotropies, and wavelength-dependent decay times are highly sensitive to the phase state of phospholipid vesicles. The emission maximum of PTMAN shifts from 425 to 470 nm at the bilayer transition temps. The spectra properties of PTMAN reveal nanosecond time-dependent spectra shifts, which are the result of membrane relaxation around the excited state of PTMAN. The apparent fluorescence lifetimes of PTMAN are strongly dependent upon the emission wavelength, and the fluorescence phase and modulation data prove that the spectral shifts are due to an excited-state process and not ground-state heterogeneity. As expected, the anisotropies are dependent upon the emission wavelength because the duration of the excited state varies across the emission spectrum. The different apparent lifetimes across the emission spectrum allow the relaxed and unrelaxed emission spectra to be resolved by phase-sensitive detection of fluorescence. Also, the emission spectra of PTMAN show marked shifts to longer wavelengths as the excitation wavelength is increased. These red-edge excitation shifts are sensitive to the temperature and phase state of the bilayers.
IT 63-89-8 18194-24-6
(liposomes containing, palmitoyl[[[(trimethylammonium)ethyl]methyl]amino]naphthalene chloride as fluorescence probe of)
RN 63-89-8 HCAPLUS
CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 18194-24-6 HCAPLUS
CN 3,5,9-Trioxa-4-phosphatricosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxotetradecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry.



CC 9-5 (Biochemical Methods)
Section cross-reference(s): 23, 25
IT Micelles
(detergent-containing, palmitoyl[[[(trimethylammonium)ethyl]methyl]amino]naphthalene chloride as fluorescent probe in)
IT 63-89-8 4235-95-4 4537-77-3 18194-24-6
(liposomes containing, palmitoyl[[[(trimethylammonium)ethyl]methyl]amino]naphthalene chloride as fluorescence probe of)
OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L27 ANSWER 59 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:193733 HCAPLUS Full-text
DOCUMENT NUMBER: 98:193733
ORIGINAL REFERENCE NO.: 98:29353a,29356a
TITLE: Effect of pH of the medium and concentration of binary electrolytes on phase transitions in aqueous dispersions of dipalmitoylphosphatidylcholine
AUTHOR(S): Sokolova, A. E.; Gracheva, O. A.; Lev, A. A.
CORPORATE SOURCE: Inst. Cytol., Leningrad, USSR
SOURCE: Biofizika (1983), 28(2), 228-32
CODEN: BIOFAI; ISSN: 0006-3029
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Scanning calorimetry and fluorescent probes were used for investigation of the influence of 1:1 electrolytes (NaNO3, KNO3, HCl, NaCl, KCl, RbCl, CsCl) on the thermotropic behavior of nonsonicated water dispersions of dipalmitoylphosphatidylcholine (DPPC). Thermodn. parameters of the main gel-

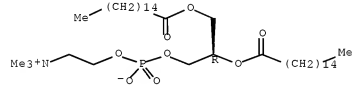
to-liquid crystalline phase transition were determined for a wide range of concns. of these electrolytes. The dependence of the main phase transition temperature on electrolyte concentration differed for low and high concentration regions. No difference in this dependence was observed for chlorides of the alkaline cations. An increase of HCl concentration produced similar changes in the phase transition temperature but at much smaller concns. of the acid compared with the salts. Changes in ΔH and ΔS in the presence of Cl- and NO3- were of the same type as produced by SCN- and I-, known as the chaotropic anion effect. The magnitude of shifts in parameters characterizing gel-to-liquid crystalline phase transition were different for the same concns. of nitrates and chlorides in the dispersion, indicating a more pronounced dependence of the DPPC phase state on anion species as compared to that of alkaline cations.

IT 63-89-8
(phase transition of, pH and electrolyte effect on)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 6-6 (General Biochemistry)

IT 63-89-8
(phase transition of, pH and electrolyte effect on)

L27 ANSWER 60 OF 60 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1981:26466 HCAPLUS Full-text

DOCUMENT NUMBER: 94:26466

ORIGINAL REFERENCE NO.: 94:4325a,4328a

TITLE: Fluorospectroscopic studies of various ganglioside and ganglioside-lecithin dispersions. Steady-state and time-resolved fluorescence measurements with 1,6-diphenyl-1,3,5-hexatriene

AUTHOR(S): Uchida, Tsutomu; Nagai, Yoshitaka; Kawasaki, Yukishige; Wakayama, Nobuyuki

CORPORATE SOURCE: Dep. Pathobiochem. Cell Res., Univ. Tokyo, Tokyo, 108, Japan

SOURCE: Biochemistry (1981), 20(1), 162-9
CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Mol. motions of 1,6-diphenyl-1,3,5-hexatriene (DPH) in gangliosides (GM3, GM2, GM1, GD1a, and GD1b), GA1 glycosphingolipid, and dipalmitoyl-sn-glycero-3-phosphorylcholine (DPPC)-ganglioside mixed dispersions were studied by techniques of steady-state and nanosecond time-resolved fluorescence measurements in the temperature range of 20-50°. The total fluorescence decay s(t) was approximated to a best-fit curve of double-exponential decays, and 2 fluorescence lifetimes were obtained. The values of the shorter fluorescence

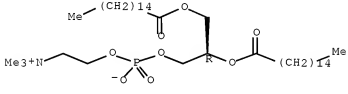
lifetime in dispersions composed of a single glycosphingolipid component approached those of the longer lifetime on addition of DPPC. The mol. arrangement or microheterogeneity of the hydrocarbon region surrounding DPH mols. changed, depending on the ratio of DPPC to ganglioside mols. and on the temperature The steady-state anisotropy (rs) in dispersions composed of a single glycosphingolipid component exhibited smooth, not abrupt, changes in the temperature range, in contrast to that in DPPC liposomes. In the various glycosphingolipid dispersions studied, the motion of DPH mols. was the most restricted in the GA1 dispersion. Sialic acid linked to the neutral sugar backbone influenced the hydrophobic region and increased the motion of DPH mols. In the gangliosides tested, the motion of DPH mols. in the hydrophobic region of GM1 ganglioside was the most restricted. Evidently, the ultimate and(or) penultimate carbohydrate moieties of the neutral sugar backbone of gangliosides and the topog. difference in the locations of the sialic acid linkage influence the integrity of the membranes including the hydrophobic region.

IT 63-89-8
(ganglioside dispersions containing, mol. dynamics of)

RN 63-89-8 HCAPLUS

CN 3,5,9-Trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-, inner salt, 4-oxide, (7R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



CC 6-5 (General Biochemistry)

IT Gangliosides
(mol. dynamics of dispersion of)

IT Molecular dynamics
(of ganglioside and ganglioside-lecithin dispersions)

IT 63-89-8
(ganglioside dispersions containing, mol. dynamics of)

IT 12707-58-3 19553-76-5 19600-01-2 37758-47-7 54827-14-4 71012-19-6
(mol. dynamics of dispersion of)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)